Lecture
ON
THE TREATMENT OF CHOLERA.

Delivered at the Royal Victoria Hospital, Netley,

BY DEPUTY INSPECT.-GEN. MACLEAN, M.D.,
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THE lecturer gave a *résumé* of what had been said in detail in previous lectures on the history of epidemic cholera and its progress through the various parts of the world, and particularly the routes by which it has invaded this country; showing how invariably it has followed the stream of human intercourse by sea and land; and dwelling on the fact so much insisted on by Budd, that it has invariably first appeared in this country at a seaport, and that the one having the most direct and frequent intercourse with an infected foreign port or country. Dr. Maclean reminded his audience of the mode in which it is propagated in India. Starting from some unsanitary city or district, that it is spread by pilgrims, bodies of travellers, or troops, in movement from village to village and from one district to another. How a tainted regiment propagates the disease along its line of route. How a healthy regiment meeting another suffering from cholera, and communicating with it, almost invariably contracts the disease; thus forming a fresh focus and centre of propagation along its line of march. How healthy bodies of men encamping on ground saturated with the discharges of cholera patients almost invariably suffer: and many facts of a like kind, all tending to show what strong ground there is for believing that this pestilence is propagated by human intercourse, and that, in all probability, mainly by the poisonous action of the excretions of the affected after they have undergone certain changes.

From this Dr. Maclean passed on to consider the most rational methods of prevention in barracks, camps, and garrisons, on the line of march, and in transports, pointing out that these rules are, most of them, quite as applicable to prisons, schools, or manufactories as to troops. Dr. Maclean showed by numerous striking examples the terrible results that follow when cholera obtains a footing in barracks or prisons that are overcrowded. The lecturer then urged the necessity of attention to the state of the latrines, showing that in India the dormitories most under the influence of a privy atmosphere invariably present the largest number of cases and the heaviest mortality. The necessity of paying scrupulous attention to the quality of the water-supply was next insisted on, and proof given of the importance of this both from Indian experience and from the history of the disease in this country.

Dr. Maclean then urged that no epidemic of cholera should ever take medical officers serving in the plains of India unawares; that the probability of such an outbreak amongst the troops under their charge should ever be present to their minds, and all their plans and arrangements should, as much as possible, be made beforehand. He read the General Order of Sir Hugh Rose, deduced from the labours of the Cholera Commission in India, and explained its various provisions. This led to a full exposition of the duties of military medical officers during the prevalence of the disease in barracks, in camps, and on the line of march.

Dr. Maclean dwelt much on the importance of frequent inspection of troops by medical officers and intelligent medical subordinates for the purpose of detecting the stage of premonitory diarrhœa, giving many examples of a great saving of life by attention to this simple measure, and demonstrating how the same rule, if carried out in prisons, schools, and manufactories in this country during the prevalence of cholera, would effect the same object. Premonitory diarrhœa is quite as common in this country as in India; and it is lamentable to see how much even well-informed people neglect the warning it gives. The late lamented Health Officer of Southampton was thus admonished for more than thirty hours before vomiting and rice-water evacuations appeared. Unhappily he, too, despised the indication of danger, and perished.

The treatment of this premonitory diarrhœa most insisted on was immediate recourse to the recumbent position, and the use of a warm, stimulating draught in combination with opium. Dr. Maclean spoke highly of the formula for the mixture in the "Medical Field Companion," intended to "promote reaction in diarrhœa and cholera": Oil of aniseed and oil of cajeput, of each one fluid drachm and a half; Haller's acid solution and tincture of cinnamon, of each two drachms. The dose of this is ten to fifteen or twenty drops, with the addition of fifteen or twenty drops of tincture of opium, or Battley's sedative solution. The mixture can be given again at short intervals. It is seldom necessary, or even expedient, to repeat the opiate. Great comfort and support is given at such a time by the use of a stout calico belt, lined with flannel, worn over the abdomen. Some care in diet is advisable for a few days.

Coming to the treatment of cholera when fairly established, Dr. Maclean thus expressed himself:—

Dr. John Macpherson, late of the Bengal army, and for many years one of the physicians to the Calcutta General Hospital, one of the most conscientious observers and recorders of facts in our profession, after approvingly quoting the melancholy words of Bouchardat (who concludes his account of what he calls the "*funeste champ de bataille* of the cholera epidemic of 1850" with the confession "that he had not only not seen a single efficacious remedy, not one discovery, not a single thought indicative of scientific progress"), adds: "The experience of the last fourteen years in Bengal has not been dissimilar. How many of the new remedies have stood their ground? Saline enemata, the successors of saline injections into the veins, have had their day. Croton oil and opium pills were at one time pronounced to be nearly infallible. Bloodletting I saw at one time employed; it is now entirely abandoned. A Madras surgeon found carbonate of soda wonderfully efficacious, as if to neutralize the acid of the Austrian cure. Ether and chloroform were immediately seized on, not only to allay the spasms, but to cure the disease. One surgeon recommended to the service the practice of parboiling his patients, but lived to abandon the procedure. The cold sheet, whether dipped in plain cold water, as in Bombay, or in an acid solution, as in Bengal, has been considered to work wonders. Quinine was recommended to the public, and immediately the newspapers were filled with the accounts of cures worked by the indigo planters by means of it. Nitrate of silver has been recommended here as in France, and may deserve a more extended trial. On the ground that, as an absence of bile from the evacuations was the great characteristic of cholera, its restoration *must* be the great remedy, ox-gall was recommended—and tried." Among all these remedies, adds Dr. Macpherson, "I can scarcely say that any one is an important addition to our stock, except perhaps chloroform."

This passage was often in my mind in the early part of this winter, when men's minds were agitated by the presence of cholera in Southampton and other places. You must all remember how not only the professional journals, but the daily newspapers also, teemed with "cures" and "remedies" for cholera. One gentleman thought he had made a great discovery in hot mustard baths, and announced it in *The Times* with an honest confidence that somewhat surprised others as well as myself. The truth is, that seeing how prominent a symptom low temperature is in this disease, attempts to stimulate the surface and restore the circulation in this way were amongst the earliest remedies that occurred to the minds of physicians—first in India, and subsequently in this country. I well remember that all the places set apart in Edinburgh for the reception of patients, on the occasion of the first epidemic, were fitted with every conceivable means for applying both dry and moist heat. The extract given above from Dr. Macpherson shows that in India the "parboiling" system has had its advocates; and hundreds of living Indian practitioners can testify to the futility, to say the least, of this method, even when mustard has been added to give more activity to the measure. My colleague Dr. Davidson, Assistant Professor of Pathology at Netley, assures me that he has seen as many as twelve patients subjected to this method of treatment in one night at Peshawur. I wish I could say that only negative results have been obtained; but it is not so. In any but the trifling sort of cases in which this remedy was used in Southampton, it is not only a useless, but a highly dangerous remedy. To take a man in the collapsed and pulseless stage of cholera out of the horizontal posture, where alone there is a hope of safety, and to plunge him in this condition into a bath heated to the highest bearable temperature short of absolute scalding, to which mustard in large quantities has been added to make it more stimulating, is, in my judgment, about the surest method that can be taken to exhaust the

little remains of vitality left. Experience has abundantly proved this, for so many men have perished in this way actually *in* the baths that the practice thus urged on the attention of the public as novel and efficacious has long since been abandoned in India. The novelty to me was not the treatment, but the explanation of the *modus operandi* of the remedy. How mustard and hot water, used in this or any other way, can "aërate the blood in the capillaries," I do not understand, and therefore cannot explain.

Dr. Chapman has urged his treatment by the application of ice to the spine with much earnestness on the profession, on the following theoretical grounds:—"1st. That the primary cause of cholera is, as a general rule (liable to exceptions which will be indicated), the excessive heat of hot climates, and of temperate climates in summer when cholera prevails. 2nd. That the *proximate* cause of cholera is of precisely the same nature as that of summer or choleraic diarrhœa;" that is, as Dr. Chapman has explained in another place, "the dorsal nervous centres and those in intimate connexion with them which directly govern the alimentary canal become suffused with blood much more copiously than is natural by the stimulant effects of the excessive external heat in hot climates, and of temperate climates in summer, and most rapidly by the direct rays of the sun on the back of the patient; the result on the intestinal canal being, that the bloodvessels nourishing the tube receive a larger supply of nervous influence from the vaso-motor nerve-centres than before, and hence, *contracting* more vigorously than natural, cut off to a proportionate extent the supply of blood to, and consequently the nourishment of, the intestinal walls. The bowels thus lose their wonted robustness, and become susceptible of being excited and thrown into excessive or convulsive activity by a stimulus which in their healthy condition would but slightly affect them." This hyperæmic condition of the nervous centres presiding over the bowels is, according to Dr. Chapman, the reason why the bowels, on the addition of the "nervous influence" which causes their peristaltic contractions, expel their contents with preternatural rapidity. In cholera this nervous hyperæmia is more developed, and consequently its action is proportionately more powerful and intense.

Dr. Chapman further regards the muscular debility, tremor, vertigo, impairment of respiration, cold breath, sense of faintness, &c., as due to the extreme hyperæmia of the spinal and sympathetic nervous centres, depriving the capillaries and vessels in all parts of the body of their wonted supply of blood. The rationale, then, of the ice-bag to the spine is that it corrects this hyperæmic condition of the nervous centres, and so restores the system to its normal condition.

I have only to say of this ingenious theory, that if heat acts so powerfully in this way, diarrhœa ought to prevail most during the prevalence of the hot land-winds in India, which is certainly not the case. So constantly is high temperature in operation in the plains of India that if heat acts in the way Dr. Chapman supposes, it is hard to explain why cholera should ever be absent from the hot plains at all, and still more so why, without any diminution in temperature, this terrible malady has at various times been dormant for long periods of years. It is a noteworthy circumstance, too, to my mind equally hard to reconcile with Dr. Chapman's theory, that cholera is quite as fatal during a St. Petersburg winter as in the hottest part of Lower Bengal.

I had the pleasure of meeting Dr. Chapman in Southampton when he came down to put his ice treatment to the test of experience, and I had the advantage of hearing him expound his views at a meeting of one of the Southampton Medical Societies. I took the liberty on that occasion to say that, although I differed materially from Dr. Chapman as to the mode in which the disease is propagated, I would gladly give his method a fair trial; and had the disease appeared in the Royal Victoria Hospital, I was prepared to do so. I do not think that the result of the trials of this method at Southampton were sufficiently extensive to warrant any confident opinion one way or the other. I have had too much to do with cholera to rush into large conclusions as to the effects of remedies in ten or a dozen cases. Every person smitten with cholera does not, as a matter of course, die; but judging from recent cholera literature, in every case where death does not occur, the fortunate issue is, without hesitation, put down to the credit of the remedies used; and if we have regard to the variety and number of these remedies, to say nothing of their opposite qualities, the result is very puzzling to those who do not reflect on the fact, that a certain number of people recover under every variety of treatment not positively hurtful, and, I may add, quite as many where no "treatment" in the shape of drugs has been used at all. Dr. Chapman has since, I understand, had an opportunity of trying his method on a larger scale in Paris. I am quite prepared to hear that this more full experience has tended to lessen the confidence with which Dr. Chapman was inspired when I had the pleasure of meeting him here. The powerful action of ice to the spine on the uterus has been pointed out by Dr. Chapman. It was well illustrated in one of the cases of cholera at Southampton. The application of ice to the spine of a woman profoundly collapsed brought on the menstrual discharge, which had ceased for ten or twelve days. This, as Dr. Chapman has himself shown, should be kept in mind, as otherwise in pregnant women unpleasant consequences might result from the application of the ice-bag low down on the spine.

Of all the methods of treating cholera that have come under my notice, the most extraordinary is certainly that which, for want of a better name, I venture to call "the corking-up method." The essence of this plan consists in restraining the evacuation of the rice-water stools by mechanical means; by bandaging, and, it is gravely added, "by plugging the anus!" The author of this ingenious invention is of opinion that if he can only cork our patients up as he would a bottle, all must be well. It does not appear to have occurred to him that once the serum of the blood has escaped into the bowels it may as well be in the chamber-vessel as in the intestine, for all the use it is or can be to the patient. So completely does this fallacy of regarding the mere purging as the essence of the disease underlie this, as it does so many other remedies and modes of treatment, that the author of this hopeful method holds out as one of the advantages of mechanically restraining the evacuations, "that in time they will be re-absorbed!"—i. e., that this poisonous excretion will be again taken into the system to the advantage of the sufferer! Why not treat our patients suffering under typhoid fever in like manner? The diarrhœa in that disease is very "exhausting." Why don't we learn from this gentleman, cork our patients up, and so obtain for them all the advantages of this "re-absorption"? No wonder the public were stunned and bewildered by the cholera literature of the last three months; no wonder a cry of "no confidence" arose on every side when "doctors" thus "differed," adding to the panic and distrust by promulgating crude, contradictory, and often irrational modes of treatment.

It would be unprofitable to pursue this part of my subject further. I wish I could hope that we have seen the last of a practice which is neither dignified nor useful.

(To be continued.)

FURTHER OBSERVATIONS ON THE RESTORATIVE TREATMENT OF PNEUMONIA.

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THE two following cases, which entered the clinical wards of the Royal Infirmary at the same time, and were treated together, offered to the students striking examples of the effects of a restorative treatment as compared with that of bloodletting. They also throw light on the best method of palliating symptoms.

CASE 1.* *Double pneumonia, involving the whole of the right lung and the lower two-thirds of the left lung; cardiac disease; no bleeding; palliative effect of warm poultices; convalescent in fourteen days; dismissed well from the infirmary after sixteen days' residence.*—John B——, aged fifty-seven, hawker, admitted Dec. 20th, 1860.

History.—This man was discharged from the army in 1847, in consequence of long-standing chest disease, attended with cough, expectoration, hæmoptysis, and aphonia. Nine years ago he had severe rheumatism, since which time he has been subject to palpitations. On the evening of the 14th, after exposure to inclement weather, he was seized with a severe rigor, followed by intense febrile symptoms, cough, and expectora-

* Reported by Mr. Archibald Hamilton, clinical clerk.

tion. On the 16th he felt pain at the base of right lung anteriorly. These symptoms increased until he was admitted into the infirmary.

Symptoms on admission.—Urgent dyspnœa, respirations being 56 in the minute. A cutting pain in the right chest anteriorly, increased on inspiration. Occasionally severe cough, with scanty frothy expectoration. On percussion, the anterior surface of the chest is resonant, with the exception of the lower third of the right lung, over which there is dulness. On auscultation, there is crepitation heard over the dull portion on the right side, and great harshness of breathing in the upper two-thirds. Posteriorly, there is dulness on percussion over the lower two-thirds of the right lung, with crepitation, sibilation on expiration, and great increase of vocal resonance on auscultation. On the left side there was no dulness on percussion, but slight crepitation at the base on auscultation. Pulse 104, of fair strength; heart not examined, in consequence of the great dyspnœa; slight headache; tongue covered with a moist white fur; great thirst, no appetite; bowels open. Face flushed, eyes suffused; skin hot, but not dry. Urine high-coloured, clear, sp. gr. 1025; no albumen; chlorides diminished. Ordered a mixture consisting of one ounce of liquor of acetate of ammonia, two drachms of spirit of nitric ether, to five ounces of water; a tablespoonful to be taken every four hours. To have strong beef-tea.

Progress of the case.—Dec. 21st: Passed a restless night. Intensity of the symptoms not diminished. On percussion over the back, dulness on the right side now extends from the apex to the base, and over the lower third of the lung on the left side. On auscultation, tubular breathing, crepitation, and ægophony very distinct on the right side, and loud crepitation over the dull portion on the left side; above on this side respiration puerile. Pulse 92, of fair strength. The great dyspnœa and harsh respiration render examination of the heart unsatisfactory; but, on asking him to hold his breath for a moment, a distinct blowing murmur is heard with the first sound at the apex. Strong headache; great pain in right side. Chlorides in clear urine further diminished. A warm poultice to be put over lower half of right chest. Continue beef-tea.

Dec. 22nd.—All the urgent symptoms continue with the exception of the pain on the right side, which is now gone, and replaced by pain on the left side. Expectoration gelatinous, rusty, interspersed with orange-coloured masses. Urine loaded with lithates. To omit saline mixture. To take two tablespoonfuls every four hours of the following mixture: spirit of nitric ether, three drachms; colchicum wine, one drachm; water, five ounces and a half. A large warm poultice over the left chest.

23rd.—The patient was found last evening at the visit to be breathing tranquilly, free from pain; respirations 44 in the minute; pulse 104, soft. Has taken an ounce of wine in water. Experienced great relief from the warm poultices. To-day, at the visit, still slight pain on coughing; sputa orange-coloured. Dulness diminished on right side, but occupies lower two-thirds of the left lung. Urine densely loaded with lithates. To have four ounces of port wine daily.

25th.—Urine still loaded with lithates; the chlorides have returned. Pulse 80, soft.

28th.—Slept well. Tongue moist, clean at the edges; pulse 78, soft. Physical signs diminished in intensity, but crepitation still distantly audible over diseased lungs. Had four ounces of steak for dinner, which he ate with relish. Convalescent.

Jan. 4th.—Since last report the symptoms and physical signs have rapidly disappeared, with the exception of slight dulness and increased vocal resonance at the base of left lung. Blowing murmur at cardiac apex very soft. Dismissed.

CASE 2.* *Double pneumonia, involving the whole of the right side and one-third of the left side; albuminuria; bled on the day of the attack; great prostration; convalescent on the twenty-seventh day, and could only be dismissed from the infirmary on the thirty-eighth day.*—James P——, aged forty-seven, quarryman, admitted into the clinical ward of the Royal Infirmary Dec. 19th, 1860.

History.—He says he has always been robust, but not of very temperate habits. During the last eight years he has had two or three severe attacks of inflammation in the chest, similar to that he now labours under. On the 17th inst., when working in a tunnel with wet clothes on, and exposed to a strong current of wind, he was seized with a rigor, headache, and thirst. He returned home at half-past five, but could take no nourishment, and then experienced pain in his right side. This increased so rapidly that he sent for a medical man, who took twenty ounces of blood from his right arm by venesection, remarking, at the same time, that it was not customary to bleed now-a-days. The patient thinks he got relief for a short time after the operation, but during the night he was very restless, and had great thirst, severe headache, hot skin, pain in the side, and cough. On the following day all his symptoms were aggravated, and he commenced to expectorate. In the evening he was ordered to take a sweating powder and an ounce of Epsom salts; but, finding himself worse next morning, he entered the infirmary about one P.M.

Symptoms on admission.—Though in a state of great exhaustion, he could walk and give a clear account of his case. He was, however, immediately put to bed, and ordered two tablespoonfuls of port wine in strong beef-tea to be taken every two or three hours, while his examination was postponed until the evening visit.—Evening, nine P.M.: The patient had a short, frequent cough, with expectoration, which was frothy, tenacious, and slightly rusty. Complains of soreness in the right infra-mammary region, which became pain on coughing, taking a long breath, or making any exertion. Breathing short and hurried; expiration prolonged. On percussion anteriorly, there is dulness over the whole of right chest, but more marked from a horizontal line drawn an inch above the nipple down to the hepatic dulness. Left lung resonant. On auscultation, there is crepitation over the whole of right side of chest, from apex to base, but loudest about two inches above the nipple. There is also great increase of the vocal resonance. On the left side breathing is puerile. Posteriorly, complete dulness with crepitation, and pealing resonance of the voice, over the lower two-thirds of the right lung, with tubular breathing over the upper third. Left side, respiration everywhere puerile. Pulse 106, weak; lips dry; tongue furred in the centre, moist at the edges; disagreeable taste in the mouth; no appetite; frontal headache, with horrible dreams at night, which are broken by frequent cough. Has had two stools since admission. Urine of a muddy orange colour; sp. gr. 1015; chlorides greatly diminished, but a considerable amount of albumen present. Skin hot, but slightly moist. Patient could only lie on his back, and seemed greatly prostrated.

Progress of the case.—December 20th: Slept well last night. The breathing easier. Expectoration profuse, consisting of tenacious gelatinous matter, of the colour of greengage juice. Marked dulness over the whole right lung, with tubular breathing over the upper third. The physical signs and other symptoms the same. To have six ounces of wine, and to take a tablespoonful every four hours of the following mixture:—Antimonial wine, one drachm; solution of acetate of ammonia, one ounce; water, five ounces.

Dec. 21st.—Yesterday evening the house-physician detected crepitation over lower third of right back. Passed a restless night. To-day is greatly exhausted; cannot move; face pale and pinched. Breathing loud and tracheal; respirations 42 per minute. Expectoration more scanty, but of the same character. Cardiac sounds indistinct. Pulse 88, weak, irregular, and intermittent. Constant tendency to sleep. Urine still albuminous, with scanty chlorides. In consequence of his extreme exhaustion the chest was not examined physically. To have a tablespoonful of port wine in beef-tea every two hours.

22nd.—Yesterday afternoon the bowels were well opened. Slept little during the night, being harassed with cough, dyspnœa, and frightful dreams. To-day there is dulness, tubular breathing, and bronchophony below the left scapula. On the right side physical signs unchanged. No appetite, but takes the nutrients regularly. Omit mixture.

23rd.—Restless night, but somewhat better to-day. The tubular breathing over the upper third of right lung and under the left scapula now transformed into coarse crepitation. Still great exhaustion.

24th.—Passed a better night. Pulse 84, fuller and less irregular. Breathing easier and less rapid. Expectoration less tenacious, but frothy; of dirty yellow colour.

25th.—Breathing easier; expresses himself as better.

31st.—Has been much the same since last report. Thirst and febrile symptoms continue, especially at night. Has little appetite, but ordered to try steak diet.

Jan. 12th.—Since last report the physical signs have been slowly diminishing, and he has been gradually gaining strength. The vocal resonance, tubular breathing, and crepitation on both sides of the chest posteriorly still continue, but are now much diminished. Expectoration small in quantity, frothy, mucous, and slightly purulent. Slept well last night, and had

* Reported by Mr. Peter M. Braidwood, clinical clerk.

less febrile excitement. Pulse 78, of good strength. He could only to-day be declared convalescent.

26th.—Strength has been slowly improving. There is still slight cough and expectoration. Urine continues albuminous. For the last few days has been taking exercise in the open air. Dismissed.

April 28th.—He was readmitted, saying that since his dismissal he has been working in a tunnel near Peebles. Three days ago he was seized with shivering, but worked on for three hours. He then went home, and sent for a medical man, who cupped him, but he does not know how much blood he lost, as he became unconscious. On admission there was dulness over the whole right lung anteriorly, most marked from the apex to the third rib. On auscultation there was tubular breathing over the upper third, and crepitation over the lower two-thirds of the lung, with coarse double friction murmur and increased vocal resonance. On the left side anteriorly there was dulness from the apex down to the fourth rib, below which point percussion was resonant. On auscultation, tubular breathing, with sibilation on inspiration, and increased vocal resonance. Posteriorly, on right side marked dulness from the apex to lower angle of scapula, and on the left side from apex to base. Over the whole of the dull portion breathing was tubular, with double friction on the right side, and crepitation at the base on the left side. Cough severe; great dyspnœa; expectoration moderate, gelatinous, and of a dirty green colour. Prostration extreme. Pulse 108, very weak.

He was treated in the same manner as during the former attack. On the 16th of May he was convalescent, though still very weak, and readily took an egg and rice pudding for dinner. He has had six ounces of port wine daily. From this time he slowly recovered, and was dismissed May 30th, with dulness on percussion over right lung from apex to the lower angle of the scapula; but, with the exception of harshness on inspiration over the dull portion, otherwise in a normal state.

Remarks.—The first of these cases presented the most severe and extensive attack of pneumonia I ever saw, involving as it did the whole of the right and two-thirds of the left lung. It was also complicated with mitral incompetency of the heart, and occasioned an amount of dyspnœa, lividity of the face, pain, and general uneasiness seldom witnessed. Experience, however, having taught me that the danger of these symptoms is more apparent than real, I did not attempt to alleviate them by cupping or venesection—a practice which has been recently inculcated. In addition to giving salines and restoratives, I simply applied large warm poultices over the painful sides, which at once caused great relief, and appeared to be both more soothing to the patient and more permanent in their effects than small bleedings. Since the occurrence of this case I have continued this practice with the best results, and have never since employed bloodletting in any shape as a palliative. Not that I think the loss of a small quantity of blood dangerous or incapable of giving relief, but that it is unnecessary. Large warm poultices relieve more, and may possibly serve to assist the transformation of the exudation in the lung, and facilitate recovery.

The second case was also a severe one of double pneumonia, but was bled on the day of the attack. So far from producing benefit, it was followed by such extreme prostration that his dissolution was hourly expected for three days. Beef-tea and wine, however, were assiduously administered, and he slowly rallied. Convalescence could not be said to have fairly set in until the twenty-seventh day of the disease, and he could not be discharged from the infirmary until the thirty-eighth day—a period which in former times was looked upon as a good recovery.

Now if, as is contended by some, the study of individual cases instructs us more than a statistical investigation of them, much may be learned as to the treatment of pneumonia from the two now recorded. Both men had been labouring under previous disease, but the advantage of age and of constitutional vigour was on the side of P——. Both had double pneumonia, but in P—— it was not so extensive as in B——. Both had complications, but that of B—— was the most liable to intensify a pulmonary disease. B——'s was unquestionably, in every point of view, the worse case of the two, yet he rallied rapidly, and was dismissed from the infirmary quite well after sixteen days' treatment. P——, on the other hand, only slowly recovered from extreme prostration, and could not be dismissed before the thirty-eighth day. All experience tends to prove that the cause of this difference was the treatment. The venesection, though practised on the very day of the attack—that is, when we are told by systematic writers it is capable of producing the best effects, and of strangulating the disease, caused a prostration that was nearly fatal. It is also to be observed that in the second attack he was cupped to syncope with a like prostrating effect. Neither did the bleeding, whether by venesection or cupping, produce that marked relief or palliation of the symptoms which has recently been contended for. It is clear therefore that, as far as these two cases are concerned, it was not the extent of the disease nor the severity of the symptoms which led to the difference of result, but the restorative treatment in the one, and the weakness produced by bleeding in the other. This conclusion is supported by my statistical table,* which distinctly shows that, of 15 cases where the whole of one lung was involved, and in 26 cases where portions of both lungs were affected, the rapidity of recovery was dependent, not so much on the extent of tissue inflamed, as is generally supposed, as on the restorative or weakening system of treatment employed.

In reference to this point the following table, for which I am indebted to Mr. M'Dougall, the present superintendent of the Royal Infirmary, is interesting, showing the number of patients which have entered that institution since 1839, the number of cases of pneumonia, and the results:—

YEARS.	Total No. of Cases entering the Infirmary.	CASES OF PNEUMONIA.		
		Total Treated.	Recovered.	Died.
1st July, 1839, to 1st Oct., 1841	7969†	139	90	49
1st Oct., 1841, to 1st Oct., 1842	3537	42	26	16
1st Oct., 1842, to 1st July, 1843	2760	41	26	15
1st July, 1843, to 1st Oct., 1844	6977†	31	20	11
1st Oct., 1844, to 1st Oct., 1845	3252	50	37	13
,, 1845 ,, 1846	3638	47	51	16
,, 1846 ,, 1847	7435†	93	52	41
,, 1847 ,, 1848	7064†	104	60	44
,, 1848 ,, 1849	3686	88	71	17
,, 1849 ,, 1850	3078	81	65	16
,, 1850 ,, 1851	4637	73	52	21
,, 1851 ,, 1852	4341	106	86	20
,, 1852 ,, 1853	4262	84	63	21
,, 1853 ,, 1854	4211	47	54	13
,, 1854 ,, 1855	3990	64	53	11
,, 1855 ,, 1856	3816	68	56	12
,, 1856 ,, 1857	3358	39	36	3
,, 1857 ,, 1858	3465	61	56	5
,, 1858 ,, 1859	3718	50	43	7
,, 1859 ,, 1860	3894	54	43	11
,, 1860 ,, 1861	3937	78	70	8
,, 1861 ,, 1862	3892	73	63	10
,, 1862 ,, 1863	4384	86	75	11
,, 1863 ,, 1864	4253	59	49	10
,, 1864 ,, 1865	4585	48	42	6

† At these periods there were great epidemics of fever.

This table naturally divides itself into three periods:—The first before October, 1848, when an antiphlogistic practice was the rule, and when of 547 cases of pneumonia 205 died, or rather more than 1 death in 2½ cases. The second period commenced in October, 1848, when I was appointed clinical professor and first introduced a restorative practice, down to October, 1856, in which there occurred 609 cases of pneumonia, of which 131 died, or rather less than 1 in 4½ cases. The third period commenced in 1856–7, when the bloodletting controversy began which fixed so strongly the attention of medical men on the restorative treatment of pneumonia; and from that time to the present 550 cases have entered the infirmary, of which only 71 died, or 1 death in 7¾ cases. These figures speak for themselves.

* Restorative Treatment of Pneumonia. Edinburgh: Black.

PERILS OF HOSPITAL PRACTICE.—The dangers attending the duties of the medical officers connected with those of our public institutions which admit cases of contagious fever have been largely felt at the Manchester Royal Infirmary during the last few days. On Monday night, the 22nd ult., Mr. Hulme, one of the physicians' assistants, died from malignant typhus, contracted in the discharge of his duties. He was a most zealous and earnest medical officer, and universally beloved by those with whom he came in contact.

CLINICAL OBSERVATIONS
ON
DISEASES OF THE RECTUM.

BY JAMES R. LANE, F.R.C.S.,
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No. IV.

ON VAGINAL RECTOCELE.

IT occasionally happens, when the perineum has been partially ruptured, or when, without any rupture, the perineum and vaginal outlet have been so much dilated, or have become so much relaxed, as not to afford an adequate support to the pelvic viscera, that dilatation of the rectum and posterior wall of the vagina is gradually induced, and these parts are protruded through the vulva in the form of a tumour, which is at first of small size, but which, if measures are not taken for its relief, may become in course of time as large as, or larger than, the fist. To this condition the term *vaginal rectocele* was applied by M. Malgaigne, in a paper published in 1838, in which he has described it in his usual complete and exhaustive manner.* It had, however, been previously noticed by Sabatier, who pointed out the distinction between simple prolapse of the vagina, and the prolapse of the rectum with the vagina now under consideration. It was also well known to Sir Charles Clarke, who, in 1814, gave a clear and accurate description of it under the name of *procidentia vaginæ*, while, somewhat inconsistently, he called the analogous condition in which the bladder and anterior wall of the vagina are protruded, *procidentia vesicæ*.† Such a nomenclature could not fail to cause confusion. It is much better, therefore, to adopt the terms proposed by Malgaigne, of vaginal rectocele for the one case, and vaginal cystocele for the other, and to restrict the term prolapse of the vagina to the descent of the vaginal membrane only, not involving the adjacent structures. This latter affection, though described by various surgical writers, is, I believe, of very rare occurrence, setting aside, of course, those cases in which it is associated with the descent of the uterus. Malgaigne, who closely investigated the subject, could only meet with three cases of *true* prolapse of the vagina, and in all three it was partial and confined to the posterior part, which was protruded to a limited extent, without any corresponding dilatation of the rectum. I know of no authentic instance of prolapse of the anterior wall without corresponding descent of the bladder; but then it must be remembered that the cellular connexions between the bladder and vagina are much more dense than those between the vagina and rectum. Indeed the vagina is so closely connected with the urethra and neck of the bladder, that its separate protrusion at this part can scarcely be imagined possible.

It should be understood that in vaginal rectocele there is no displacement of the entire rectum; its posterior surface maintains its normal relation with the sacrum and coccyx; its anterior surface only is involved, and becomes dilated into a sort of pouch, which carries the vagina before it as a covering. When fæcal matters descend into the rectum, they distend this pouch, and the muscular fibres, being weakened by the dilatation, are unable to expel them; while the abdominal muscles, when called in to assist, instead of acting so as to overcome the resistance of the sphincter, expend their force upon the pouch, which they tend still further to dilate.

A rectocele is, in most cases—indeed in all which have come under my notice,—of gradual formation. Malgaigne, however, mentions two instances in which it was suddenly produced—in one case by a fall, in the other by lifting a heavy weight. Both these patients were in an advanced stage of pregnancy.

On examination of the parts, protrusion of the posterior wall of the vagina is observed; and if the patient strains, the protrusion will be seen to increase in size. On introducing the finger into the rectum, it can be readily turned forwards into the swelling, thus showing that the rectum as well as the vagina is involved; while, by passing the finger into the vagina in front of the swelling, the uterus is usually felt to be in its natural position, or nearly so.

The affection is one which causes great discomfort and distress: there is a feeling of weakness, of weight, and bearing down in the perineal region, with obstinate constipation and great difficulty in evacuating the rectum, which sometimes cannot be effected until pressure has been made upon the tumour to squeeze the contents out of it—until, in fact, the deficient contractile power of the rectum has been artificially supplied, and properly directed towards the natural outlet. Leucorrhœal discharge is a very frequent accompaniment.

I have stated that partial rupture of the perineum predisposes to this affection. It is otherwise, however, when the rupture is complete and extends through the sphincter. In this latter case there is incontinence instead of constipation; for when the fæces pass into the rectum there is nothing to prevent their escape, and dilatation therefore can hardly occur. I should have thought the existence of rectocele altogether incompatible with *complete* rupture of the perineum, but for a case recently recorded by Mr. Bryant, in which the two conditions were present in the same person.* In this individual probably the dilated rectum had been present before the laceration of the perineum took place. Out of eight cases of rectocele which have come under my notice, there was partial rupture of the perineum in five; in two there was no evidence of rupture, but the perineum was short and the parts relaxed; in one only was the perineum more than an inch in length.

It is necessary to remark that prolapse of the posterior wall of the vagina might possibly proceed from other causes than that now under consideration. A vaginal hernia, for instance, in which the intestine descends between the vagina and rectum, pushing before it the recto-vaginal fold of peritoneum, might cause a tumour similar in external appearance. Sir Charles Clarke mentions a case in which protrusion of the vagina was caused by the descent of cysts connected with diseased ovaries. It might also possibly be dependent upon an abscess in the recto-vaginal septum. The nature of the case, however, is at once made clear by examination of the interior of the rectum, the cavity of which will be more or less encroached upon in any of the cases just mentioned; whereas in rectocele it will be found to be dilated, and the finger can be at once passed forward into the tumour.

It is only within the last few years that any effectual surgical remedy has been devised for this complaint. The measures formerly recommended were merely palliative in their extent. Sir C. Clarke recommended the evacuation of the rectum by enemata, the use of astringent injections, and, in severe cases, a globular pessary to be worn in the vagina. Malgaigne relates cases in which attempts were made to diminish the calibre of the vagina by dissecting away portions of the mucous membrane covering the swelling, and uniting the edges of the incision by suture; but the result was not encouraging, and he therefore was content with a pessary of a peculiar description to retain the swelling in its place. The removal of portions of the apparently redundant vaginal membrane is not likely to be of much service: it does not remedy the corresponding dilatation of the rectum, and it does not supply the want of support in the pelvic floor which is the essential cause of the complaint. The only effectual mode in which that support can be supplied is by closure of the ruptured or relaxed perineum to a sufficient extent to retain the protrusion; and of late the operation for suture of the perineum has been applied by several surgeons (in the first instance, I believe, by Mr. Baker Brown) to the cure of rectocele, with very satisfactory results. I have myself practised it repeatedly, and it has in every instance fully answered my expectations. Indeed, whatever doubt there may be as to the efficiency of the operation in producing a permanent cure of prolapse of the uterus or of vaginal cystocele, I believe there need be none as to its effect, both immediate and remote, in vaginal rectocele.

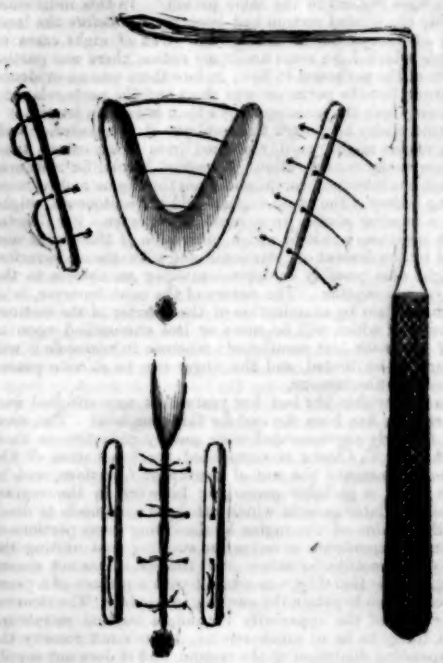
The following is the plan of operation which I have adopted for some years past for suture of the perineum, whether for rectocele or for rupture of that part. The principle is that of the quill suture, but in several of its details it will, I venture to think, be found an improvement on the methods in ordinary use. The patient being placed in the lithotomy position, a portion of skin and mucous membrane is dissected off on each side of the lower half of the vulva, so as to form a raw surface, which should be about an inch and a half in length on each side, the right and left portions being continuous with each other below across the median line. It should be an inch or more in depth antero-posteriorly at the lower part next the anus,

* See *Mémoire sur un Prolapsus particulier du Rectum dans le Vagin et à travers la Vulve, ou Rectocele Vaginal*. Mémoires de l'Académie Royale de Médecine, tom. vii., p. 488. Paris, 1838.

† Observations on the Diseases of Females, p. 134. London, 1814.

* See Guy's Hospital Reports, 1865, p. 376.

but may diminish to about half an inch in depth towards its upper part. It is better first to mark the outline of this raw surface by incision with the scalpel, and then to dissect off the mucous membrane, the thinnest possible layer of which should be removed; but it should be taken away in one piece, and not in small fragments. I much prefer this plan to transfixing the part with the knife, and cutting a sort of flap from within outwards: in the latter way a larger amount of tissue is removed, which is objectionable, and vessels of larger size are likely to be wounded. By proceeding in the way above described I have never had occasion to place a ligature on a bleeding vessel, nor have I ever met with bleeding sufficient to cause inconvenience, either at the time of the operation or subsequently. Care should be taken that the denuded surface is not situated too far outwards upon the buttock or too far inwards towards the vagina, but just where the opposite sides would naturally and readily come in contact. The deep sutures, which are to hold the quills, are next to be inserted. For this purpose I am in the habit of using a strong needle of rectangular shape, set in a handle, and with an eye near the point, as represented in the figure. This should be entered



unarmed, on the left side (the terms right and left refer to the patient, not to the operator), a full inch external to the anterior border of the cut surface; it should be passed deeply to take hold of as much tissue as possible, and brought out close to the posterior edge of the raw surface. It should then be thrust onwards through the tissues on the right side at a corresponding depth, and made to penetrate the skin at a point corresponding to that of its entry on the left. The eye near its point is now threaded with the wire suture, and the needle is withdrawn carrying the suture with it. The needle should be bent at a right angle about three inches and a half from the point, and should be slightly curved from the angle to the point. Such an instrument can be passed with much greater readiness than the needle in ordinary use, in which the handle is in a line with the shaft. I have found the latter difficult to pass, on account of the necessity of depressing the handle against the left buttock in order to carry the point through the integument of the opposite side. This inconvenience is entirely avoided with the rectangular needle, in using which also the surgeon's hand is in a much more convenient position, and the needle is passed through the parts with a simple turn of the wrist.

I am in the habit of using four deep sutures of silver wire, and of fastening them to perforated ivory bars, which represent the quills. Each ivory bar is about the size of a quill, and is perforated with four holes about half an inch apart, but they should be of different lengths for different cases. The ivory bar intended for the right side is ready threaded with two pieces of wire as represented, each piece of wire being looped through the two adjacent holes. This is held by an assistant, and the needle, after it has been passed across, is threaded with one of the four ends of wire and withdrawn; the proceeding being, of course, repeated with each of the other three. The wires are then passed through the holes of the second ivory bar, and being drawn tight, the whole is firmly secured by twisting together the ends, first of the two lower, and then of the two upper wires. By having the wires looped on the one side, no fastening is required on that side; while on the other side the two adjacent sutures are fastened simultaneously. Thus not only is time saved, but a uniform pressure upon the part is more easily secured. A single silver wire of sufficient strength to hold the quill suture securely is somewhat stiff and unmanageable. I have therefore latterly used very fine wire, twisted in three strands in the form of a rope. This gives equal or greater strength, and is at the same time much more flexible and convenient in use. Metallic sutures are greatly to be preferred to those of thread or silk. The latter, from their absorbent properties, produce much more irritation and suppuration along their track, and are therefore less favourable to immediate union.

The quill suture serves to hold the deeper part of the raw surfaces in contact, but the cutaneous edges must also be held together by four or five superficial sutures of fine silver wire. These may be most conveniently inserted by means of Dr. Simpson's tubular needle. The operation, as above described, may readily be completed in ten minutes or even less. In a case of this kind the sphincter is entire, and its action does not in any way interfere with the apposition of the cut surfaces; it is therefore quite unnecessary to divide it.

The patient is then placed in bed on her side. Sufficient opium is given to prevent the action of the bowels for the first six or seven days, and the urine is drawn off twice or thrice daily with a catheter. The deep sutures should be cut and removed, together with the ivory clamps, at the end of forty-eight hours. Some œdematous swelling generally takes place, but soon subsides after the pressure of the quill suture has been removed. I have never seen any benefit from leaving the deep sutures longer than this; on the contrary, whenever I have done so, I have found that a good deal of additional irritation, and often suppuration, has been set up, without any corresponding advantage. When metallic sutures are employed, there is rarely any suppuration along their track at the end of the second day, or if there is any, it is very trifling, and never in my experience of any injurious extent. The superficial sutures need not be removed till the sixth or seventh day, at the end of which time tolerably firm union will in most instances have been obtained. During this period a nutritious but unstimulating diet should be given, without restricting the patient's inclination as to quantity, and with a moderate allowance of beer or wine; but stimulants in any quantity, as sometimes recommended, I believe to be unnecessary in ordinary cases. The bowels should now be emptied by a brisk aperient, and the opiates discontinued. The catheter also may be dispensed with. In three or four days more, the patient may generally be allowed to move about, and at the end of a fortnight those operated on in hospital are often able to return to their homes. At the end of three weeks there is usually complete cicatrization throughout, the part is soft and flexible, and all tenderness consequent on the operation has disappeared.

The result of this operation for rectocele is in the highest degree satisfactory. I have practised it in seven cases, and in all of them have obtained a thick and firm perineum, capable of effectually retaining the protrusion. The sensation of weakness and bearing down is no longer felt, and the constipation, so far as it depends upon the mechanical difficulty in emptying the rectum, is relieved. It may be objected, that the restoration of the perineum does not cure the dilatation of the rectum and vagina, but merely prevents their protrusion externally. I believe, however, that it does more than this, and that when the parts are retained in their proper place, they will gradually return to their proper dimensions. It must be remembered that the dilatation is not the essence of the complaint, but only takes place for mechanical reasons, in consequence of the loss of support in the pelvic floor. When that support is again supplied, the dilatation by degrees disappears, or at any rate is so much lessened as to be of no practical inconvenience. In several cases which I have had opportunities of examining after the lapse of a year or more from the operation, I have been able to find scarcely any remains of the pouch which was for-

merly so evident. The protrusion is not likely to be reproduced, for the stress falls upon the posterior part of the new perineum, where it is thickest and strongest, and if the operation is properly done, there is no chance of this giving way.

In a subsequent communication I intend to refer to the operation for suture of the perineum, where the sphincter has been torn through, and the still more severe examples where the recto-vaginal septum has also suffered from laceration. In such cases some modifications in the mode of operation are necessary, and much greater care is required to ensure complete union.

Berkeley-street, Piccadilly, Jan. 1866.

OBSERVATIONS ON THE POINTS OF RESEMBLANCE BETWEEN CATTLE PLAGUE AND SMALL-POX.

BY CHAS. MURCHISON, M.D., F.R.C.P.,
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No. V.

IN my first communication, after describing the points of resemblance between cattle plague and small-pox, I wrote as follows:—"These considerations may not be sufficient to establish absolutely the pathological identity of rinderpest and variola, but they unquestionably point to a very close analogy between them. The object of this communication, however, is not to insist that the two diseases are pathological equivalents, but to enlist the assistance of the medical profession in clearing up the matter. The mode of procedure is obvious and sufficiently simple. It is to produce cow-pox in cattle by inoculating them on the one hand with vaccine lymph, and on the other with the matter of human variola; and afterwards to ascertain if they be proof against the prevalent plague, or if the course of the rinderpest be thereby modified." During the last five weeks numerous experiments of the nature here indicated have been performed in various parts of the country. Many of these experiments are still in progress; but enough, in my opinion, has been done to show that vaccination confers no *permanent* immunity from the cattle plague. The unfavourable cases reported in my last communication would prepare the readers of THE LANCET for this announcement. It is true that many cases have been reported where recourse to vaccination has had the immediate effect of arresting the progress of rinderpest in a herd, the cattle that have been successfully vaccinated, and they alone, escaping the disease. But further experience has proved that, after the effects of the vaccination have passed off, these animals are liable, on fresh exposure, to contract rinderpest, and to die of it.

The vaccinated calf belonging to Mr. Tollemache, of Dorfold Hall, which was exposed to the severe test described in my former communication, died of rinderpest on Thursday, the 25th ult., or the eighth day of the disease.

Two of the ten cows belonging to Mr. Tollemache which were vaccinated in December, at the time that six others died of rinderpest, were also seized with the disease on the 20th and 25th of January, and on the 25th the cow first seized was very ill.

On Jan. 15th the Earl of Airlie sent an ox and a heifer which had been vaccinated on Jan. 6th, and in which the vaccination had been successful, and also an unvaccinated ox, to an infected farm. On Jan. 29th the vaccinated one was dead of rinderpest, and the unvaccinated one was very ill with it. With the exception of slight cough, the vaccinated heifer had not presented any symptom of rinderpest, and was still to all appearance well.

On January 7th, Mr. Harper, surgeon of Holbeach, vaccinated two heifers. In both the operation was successful. On January 18th they were removed to two separate yards, where beasts were dying of the cattle plague. Both were taken with rinderpest on January 23rd, the sixth day of exposure, and died on January 27th.

Other cases of an unfavourable nature were reported in my last communication; but perhaps the most conclusive experiment is that which has been conducted by Professor Varnell at the Royal Veterinary College, the commencement of which was announced last week. Two cows which had been vaccinated in the country by Mr. Acton were brought to the College. Both of them showed signs of successful vaccination, and one of them on arrival had three good vaccine vesicles. On Saturday, Jan. 20th, one of these cows was inoculated with rinderpest matter from a calf (that had contracted the disease by inoculation with diluted rinderpest matter from a sheep), and the other cow was shut up in a loose box with the same calf. Within twenty-four hours the calf died. Symptoms of rinderpest showed themselves in the first-mentioned cow on Thursday, the 25th, or the sixth day, and in the second cow on the following day. In the former case the disease appeared to set in severely from the first, and on Jan. 30th the animal died. On the same date, the disease in the other cow appeared to be running a slower but probably not less certain course.

The experiment announced last week of vaccinating eight cows, four of which had passed through rinderpest, while the other four never had the disease, has for the present proved a failure. The vaccination was not successful in any of the cases, owing probably to the vaccine vesicle which supplied the lymph being too advanced.*

From what has been stated it follows that the hopes reposed in vaccination as a prophylactic against the cattle plague have not been realised. In a practical point of view, therefore, it matters little for the present whether the cattle plague be regarded as a form of small-pox or not. Our efforts to prevent it must still be restricted to absolute isolation of one herd of cattle from another, and to urge upon the Government and Parliament the necessity of completely suspending the movement of all live cattle throughout the country. But as a matter of scientific interest the variolous nature of the cattle plague is a subject still open for discussion.

To some, no doubt, the differences which unquestionably exist between the cutaneous eruptions of the cattle plague and of human small-pox will appear an insuperable objection to regarding the two diseases as in any way related; but in this opinion I am not altogether disposed to concur. Among the many points of resemblance already referred to, that of their morbid anatomy deserves especial mention, and on this head I cannot do better than quote the words of Dr. Bristowe, who has reported on the morbid anatomy of the cattle plague to the Royal Commission. Although believing the cutaneous eruption of rinderpest to be essentially different from that of small-pox, he writes as follows:—"No one acquainted with the morbid anatomy of small-pox could fail, on examining cows dead of cattle plague, to be struck with the close resemblance which exists between these two diseases in regard to their morbid anatomy. Allowing for the absence from the human being of the first three stomachs of the cow, the description of the internal lesions observable in the cattle plague might serve exactly for the description of the internal lesions in small-pox. This fact struck me at the very first post-mortem of a cow on which I was engaged, before even I had any suspicion that there was an eruption on the skin at all resembling that of small-pox."

Reference has already been made to the small-pox of sheep, which has an important bearing on the subject under discussion. This disease owes its name to the eruption that appears on the skin, which, however, differs in many important particulars from that of human small-pox. The papulæ, in place of being small and acuminated, are very large and flat; while the vesicles are rarely umbilicated, and seldom pass into pustules. "The papulæ, for instance," says Dr. W. Budd, "are much broader in the sheep, varying in breadth from that of a fourpenny-piece to that of a shilling; having the appearance of large flat warts, occupying the whole thickness of the skin, and embedded in it."† Mr. Ceely, we are informed by Prof. Simonds, "when he first saw the ovine crusts, felt doubtful of the correctness of the term *pustule*, as applied to the eruption; and has satisfied himself that it is not essentially a pustular disease, but that it is *vesicular*." Prof. Simonds adds: "The formation of pustules, as we consider, ought to be re-

* In the elaborate Report on Vaccinia and Variola recently published by a French Commission, it is stated that, in order to vaccinate successfully from cow to cow, it is necessary to open the vesicle between the third and seventh day, and that when the lymph is most copious, on the eighth or ninth day, it has lost its virulence.

† On Variola Ovina, p. 8. 1865.

garded rather as an adventitious than an essential feature of the disease."* The eruption of so-called sheep's small-pox, then, is far from being identical with that of the small-pox of man. A more important ground of distinction remains to be considered. It has been satisfactorily proved that both vaccination and variolation have no power over the small-pox of sheep. The experiments of Mr. Marson and Prof. Simonds, conducted for Government on a most extensive scale, show that both vaccination and variolation of sheep, even when successful, in no way diminish the liability to or the mortality of ovine variola; and, what is even more remarkable, that a second action of the vaccine virus is fully equal to the first, by which it appears to be in no way influenced. Similar results have been obtained by Valois, Hurtrel D'Arboval, and other French experimenters. The vaccine virus has no special action upon the organisms of sheep, as after successful vaccination they are still open to the influence of the vaccine virus, as well as to that of their own particular form of variola.† It is obvious, therefore, that what is called the small-pox of sheep differs essentially from the small-pox of man.

In cattle, there are grounds for believing that vaccination does produce a specific change in the constitution which interferes with the success of a second vaccination. Although there is a common impression that cows are liable to several attacks of cow-pox in the course of their lives, it is possible that the spurious has been mistaken for the true pox; and, in the experiments recently conducted in France by Messrs. Chauveau, Viennois, and Meynet, a second vaccination always failed to take effect. These experiments, however, were not on a large scale, and require confirmation. But, on the supposition that cattle are liable, like sheep, to a severe and fatal form of small-pox, does it of necessity follow that vaccination ought to afford to them the same protection that it does to man from human small-pox?

The answer to this question involves considerations which strike at the very root of the ordinarily accepted views as to the relations between vaccinia and variola, and with regard to which, in the present state of our knowledge, it would be premature to form any decided opinion. Many, no doubt, will think it almost heresy to throw any doubt on what has long been regarded as a canon of medical belief; but, however unpleasant it may be to have old-established views in any way shaken, we must not shut our eyes to facts which have recently been brought to light. These facts must either be admitted, explained, or refuted. The current doctrine, which originated with Jenner, is that vaccinia is merely a mild form of human variola;‡ Jenner, in fact, named it "*variolæ vaccinæ*," or the small-pox of the cow. What was a matter of theory on the part of Jenner, is generally believed to have been converted into fact by the subsequent researches of Dr. Gassner of Gunzburg, Dr. Thiele of Kasan, in Russia, and of our countrymen Mr. Ceely and Mr. Badcock. According to the experiments of these gentlemen, inoculation of the cow with the matter of human small-pox produces, not small-pox, but ordinary vaccinia, with which children may be successfully vaccinated. After many fruitless attempts, Mr. Ceely twice succeeded in arriving at this important result; while, during the last twenty years, Mr. Badcock has again and again derived fresh stocks of vaccine lymph from variolated cows, has vaccinated with such lymph more than 14,000 persons, and has furnished supplies of it to more than 400 medical practitioners.

The view now stated has not wanted opponents since the time that it was first promulgated by Jenner. Even the late Dr. George Gregory, for many years physician to the Small-pox Hospital, with a full knowledge of Mr. Ceely's experiments, expressed himself thus:—"I demur to the theory of identity, and hold that small-pox and cow-pox are antagonist affections—that cow-pox, instead of being, as Dr. Baron maintains, of a variolous, is, in fact, of an *anti-variolous* nature."§ Dr. Gregory's opinion on this matter is strengthened by the following considerations:—

1. It has been repeatedly found that in persons vaccinated while small-pox is latent in the system the two affections proceed simultaneously, and that lymph taken from a vaccine vesicle, with a concurrent small-pox eruption, produces in other individuals nothing more than ordinary cow-pox. Dr. Gregory mentions a case in point where a lancet charged with lymph from the vaccine vesicle produced cow-pox, while another lancet charged with matter from a variolous pustule, formed within the vaccine areola, communicated small-pox. On the supposition that the poisons of vaccinia and variola are essentially the same, it is difficult to understand why they remain so distinct in the same body at one time.

2. In 1836 an American physician, Dr. John C. Martin, inoculated some variolous matter, taken from a pock upon the body of a man who died of variola, into a cow's udder, and subsequently vaccinated about fifty persons with matter derived from the cow. Most of those so inoculated were attacked with variola, and three died. The result caused great excitement and consternation. Dr. Martin was ruined and soon became insane. The facts were carefully investigated at the time by several medical men; but, for obvious reasons, have only been recently published.*

3. The most important facts bearing on the question are contained in a Report published last year by a committee of the Société des Sciences Médicales de Lyon, and consisting of Prof. Chauveau and MM. Viennois and Meynet. The Report is entitled "Vaccine et Variole, nouvelle Etude Expérimentale sur la Question de l'Identité de ces deux Affections," and contains the results of the most elaborate series of experiments on the subject that has yet been made. The conclusion arrived at is that human small-pox and cow-pox are two distinct affections which are mutually antagonistic; and this conclusion is based on the following facts. 1. The inoculation of cattle with the matter of human variola produced in their experiments nothing like the local effects of cow-pox, but merely minute red papules, which might readily have been overlooked, but which were proved to be specific, by the facts that cattle thus treated were insusceptible of vaccination, that a like effect could not be produced in vaccinated cattle, and that the affection could be transmitted from cow to cow and from the cow to a child. 2. When children were inoculated with variolous matter thus passed through the system of a cow, the result was, not vaccinia, but a very modified form of variola, the eruption not being limited to the part inoculated, and being in two instances apparently communicated by infection to persons in health. The French experimenters are of opinion that Dr. Thiele and Mr. Ceely have obtained merely a modified form of variola, and not vaccinia, by passing the matter of human small-pox through the system of the cow. There are some grounds for believing that the "vaccine matter" obtained in this way by Dr. Thiele may be really a varioloid matter, inasmuch as he maintains that the virus of human small-pox diluted with warm milk, and transmitted through several generations of human beings, comes at length to produce results similar to what he has obtained by vaccination. In one of Mr. Ceely's cases, also, the inoculation of the human subject with the fluid of a variolous vesicle in a cow was followed by a general papulo-vesicular eruption.† It is difficult, however, to reconcile the results arrived at by the French experimenters with the fact that the lymph obtained by Messrs. Ceely and Badcock by the variolation of cows has been used during many years in this country for the purposes of vaccination. Another remarkable circumstance is that the French experimenters seem to have succeeded in variolating cows according to their fashion without any difficulty; while both Mr. Ceely and Mr. Badcock have succeeded in producing what they considered essential—viz., a vaccine vesicle—in an extremely small proportion of the animals experimented on.‡

It would be premature to draw any conclusion from facts of so contradictory a character recorded by experienced observers; but the circumstances now mentioned are not without importance in any discussion concerning the pathological relation of the cattle plague and small-pox.

* Simonds on Variola Ovina, pp. 78, 79. 1848.
† Report of Experiments made under direction of the Lords of the Council as to the Vaccination of Sheep. London, 1864.
‡ Certain of the arguments, indeed, in my former papers, are based on this doctrine. It is only within the last fortnight that the experiments recently performed in France have come under my notice.
§ Lectures on the Eruptive Fevers, 1843, p. 207.

* Edin. Med. Journ., July, 1860, p. 74.
† Trans. of the Prov. Med. and Surg. Assoc., vol. viii., 1840, p. 403.
‡ The reader is also referred to a memoir by M. Auzias Turenne, entitled: "La Variole et la Vaccine ne sont pas produites par un même Principe Virulent. Recueil des Travaux de la Société Méd. Allemande de Paris." Paris, 1865, p. 101.

GREENWICH WORKHOUSE INFIRMARY.—The report of our Commissioners on this house showed that its site, construction, and accommodation were irremediably bad, and that its infirmary was wholly unfitted to the hospital wants of the district. We are, therefore, glad to be able to state that the guardians think it expedient to erect a new infirmary on a more elevated position, at a cost of £10,000. In carrying out this very important object to the well-being of the sick poor we trust they will consult some competent authority, and above all, that they will not spoil their new hospital from any misguided notions of a false economy.

ON DIFFICULTY OF HEARING IN CASES OF PERFORATION OF THE MEMBRANA TYMPANI,

AND ON THE PHYSIOLOGICAL AND THERAPEUTIC IMPORTANCE OF THE TUBA EUSTACHII IN SUCH CASES.

BY F. E. WEBER, M.D., OF BERLIN.

SOME hundreds of exact observations, carefully interpreted, have led me to maintain as follows:—

1st. That the object of the tuba Eustachii is not merely that which physiologists assign to it, according to whom that organ only exists in subserviency to the membrana tympani, in which it is said to prevent any unequal or unilateral tension. According to this view, the tube must necessarily prove useless in all those cases in which difficulty of hearing coexists with defects in the membrana tympani.

Such is not, however, the true state of the case. Every observer will find that numbers of patients, notwithstanding obvious defects in the membrane of their tympanum, retain the power of hearing in various degrees; so that among persons who have suffered for years or are still suffering from otorrhœa, there are some in whom no disturbance of the function of hearing is perceptible, whilst others are extremely deaf. It may further be observed that the difficulty of hearing in such persons strikingly varies according to the state of the weather, and is affected by the occurrence of catarrh in the organs of respiration.

It will be understood, *à priori*, that the variety in the degrees of functional derangement depends upon very different causes and influences. Thus, for instance:—

1. A person in whom a chronic purulent inflammation of the cavity of his tympanum has grown out of a long-continued catarrh of the middle ear, or has been superinduced upon permanent nervous difficulty of hearing, will, of course, hear worse than one in whom a perforation of the membrana tympani affects an ear previously in a normal condition.

2. A patient in whom the affection is more recent will generally hear better than one who has been suffering for several years.

3. A subject in whom the whole cavity and mucous membrane of the tympanum is thickened in a high degree by catarrh, is in a state of hypertrophy, and is studded with polypous excrescences in a state of suppuration, will be far less able to make use of his organ of hearing than one who has the same disabilities in other respects, but in whom the inflammatory symptoms, the thickening of the mucous membrane, &c., have subsided.

4. Further, a person whose ossicula auditus have disappeared along with the membrana tympani will, as a matter of course, from this cause alone, possess powers of hearing inferior to one in whom these chief factors are still preserved entire or in their most important parts.

There are, therefore, various secondary causes co-operating, whereby the same complaint in its various stages is accompanied by various degrees of functional derangement.

Now the result of my observation is this: that in all these cases, *ceteris paribus*, the amount of disturbance in the function of hearing stands in the most definite relation to the state of the Eustachian tube. In such cases of perforated ear-drum, the more normal, the better ventilated, the less thickened the parietes of the tube, and the wider the bore, and the less obstructed by strictures or mucus, the greater do we find, on measurement, the range of hearing; whereas, when the tube is obstructed, the hearing distance descends to what is, in the particular case, the lowest possible limit.

If I find, for instance, that a person with a considerable defect in the membrane, but whose ossicula auditus are still preserved, possesses apparently an almost normal power of hearing—if, for example, he can hear my watch at a distance of about twenty feet, which is audible under normal circumstances at a distance of thirty feet,—I say, *à priori*, the tube *must* here be open, there *cannot* be any stricture or obstruction from mucus.

That such is the fact I have been uniformly convinced by the examination of some hundreds of cases conducted with the air-douche and probing. The experimentum Valsalvæ leads to no valid or decisive judgment in reference to the condition of the tube. Whereas, on the other hand, whenever such a defect in the membrane of the tympanum is associated with defective hearing, we may, without exception, be sure of effecting a marked improvement in the range of hearing by opening the obstructed tube.

The correctness of the above deductions may be tested approximately by artificial obstruction of the tube by means of bougies. With round bougies, however, we seldom succeed, and *can* only seldom succeed, in effecting a complete closing of the tube; for my investigations at the dissecting-table have taught me that the tube in the region of the isthmus is generally of an angular or oval form. From this circumstance it happens that even by the thickest bougies the tube is not always completely closed—nay, is often stretched open, so that the atmospheric communication is actually *brought about* by this means. Accordingly we find that patients suffering from perforation of the membrane of the tympanum frequently at the very moment when the bougies are inserted hear better than before. I must here add, that such observations as these can only lead to clear and constantly recurring results where there are no disturbing causes—i.e., where the chronic inflammation of the cavity of the tympanum, swelling of the mucous membrane, suppuration, &c. (which of themselves already interfere with the function), have subsided. Moreover, I repeat that such results can only be obtained where the opening of the tube has been effected, not merely by the experimentum Valsalvæ and the air-douche, but mainly by means of bougies.

In reference to the literature on this subject, it will be found that your renowned countryman, Astley Cooper, was the first to treat of it with any amount of detail. One of his pupils who had on the left side no membrane to his tympanum, and who on the right side had a large perforation, heard so well that he was able to attend his course of lectures without inconvenience, to indulge his musical propensities by playing irreproachably on the flute, &c. Only, says Cooper, he *adjusted* with difficulty. Indistinct speaking he could only hear by listening, at which times his concha, which evidently moved, was of great service to him.

This narrative, which excited great attention at that time, was only related in order to prove the comparatively small importance of the membrane of the tympanum, which had till then been considered a chief factor in the function of hearing.

For a similar reason, Morgagni had already mentioned a child who, without any membrane to the tympanum, was yet able to hear; and the founder of otiatrics in France, Itard, adduced, from the same motive, cases opposite to the present argument. In one of these, he said, the hole in the membrane was so large that the patient could impel tobacco-smoke through it, and could force the air through in so dense a current as to extinguish the light of a lamp standing opposite the ear. The other case was that of a lady, whose tympanum was so open that fluids injected into the ear passed through to the mouth, and that so energetic a current of air could be produced by blowing through the cavity of the tympanum that wadding was even expelled by it from the meatus externus; yet in this case so acute was the power of hearing that many sounds made a disagreeably loud impression.

Kramer also conceived that the power of hearing in cases of perforation did depend on the size of the hole, and was astonished to find that certain persons with large perforations often heard better than those in whom the defects were smaller. But Bonnafont, the distinguished French aurist, called Kramer's attention to the incorrectness of this judgment, and thought—what is, it is true, in a certain sense correct, but not the *punctum saliens* of the solution—that the various *degrees* in the power of hearing, in cases of perforation, depended on the degree of sensibility in the nerves, which may be *great* in cases where *large* perforations exist in the membrane of the tympanum, and *small* where there are but *slight* defects.

If in all the above cases we find the authors quoted entering so circumstantially and minutely into particulars—as when they say that "the air was expelled with audible noise from the meatus externus," that "the current of air was so dense that tobacco-smoke could be visibly pressed through," &c.,—this detailed account is only intended to prove that in the case referred to the defect in the membrana tympani was really very considerable.

There is not a word said, however, from which we could gather that this "good hearing"—which, after all, is a striking phenomenon in connexion with defects in the membrane of the tympanum—was attributed by any of the writers in question to the circumstance that the Eustachian tube, in all the cases referred to, remained open and in a healthy condition.

Sir Astley Cooper, it is true, in reference to his case, adds the remark, that the hearing of the patient was *sometimes* remarkably bad; but only when, in consequence of taking cold, the cavity of the tympanum was relaxed and filled with mucus or pus. There can be no doubt that, had the examination of diseases of the ear and the necessary implements been at that time in a more advanced state, this distinguished surgeon would not only have found the real cause of the phenomenon in question, but might also have convinced himself that this alternation between a more and a less defective hearing also takes place when there is no trace of pus, mucus, or water to be discovered in the cavity of the tympanum exposed to the eye of the observer.

It is interesting, moreover, to observe that Bonnafont, in speaking of the treatment of diseases of the tympanic cavity, made similar remarks, and takes occasion to direct attention to the circumstance that he had frequently observed an immediate improvement in hearing in cases of catarrh in the middle ear, with perforated membrane, after he had *effectually* applied the air-douche. Whilst he hereby expresses the fact that the passage of the tube had been cleared, he nevertheless, in order to explain the phenomenon in question, directs his attention to the cavity of the tympanum, and considers that the improvement in hearing which ensued is attributable to its cleansing, and to the exposure of the ossicula auditus.

(*To be concluded.*)

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum alioram, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

PRIMARY AMPUTATION OF LEG FOR INJURY; ACUPRESSURE; SLOUGHING, SECONDARY HÆMORRHAGE, PYÆMIA; DEATH.

(Under the care of Mr. BERKELEY HILL.)

IN this case secondary hæmorrhage occurred twice at the same spot, and, as the post-mortem examination showed, in a situation where ulceration and destruction of an artery were going on, a consequence which might have occurred equally well if the ligature had replaced the needle in this instance. But the most interesting point was the condition of the tibial arteries after forty-two hours' artificial obstruction of their orifices. The cut end had been the agent in forming a plug, which sufficed through all the sloughing action in the wound to close the mouth of the vessel, and had by the eighteenth day attained sufficient strength to resist the pressure of water forcibly injected into the vessel. Again, the clot of blood which usually fills the vessel up to the next collateral branch was in this instance absent, and the full force of the arterial current pressed against the plastic plug closing the end of the vessel.

A labourer, aged forty-six, of feeble constitution, admitted September 16th, 1865, with a crushed foot. Probably little blood had been lost before his admission; but he was greatly prostrated by the shock of the injury. The leg was amputated two inches above the ankle-joint. The arteries were secured by six needles; the two tibials by two needles, six inches long, passed through the stump from before backwards, so as to compress the vessels against the tibia. Four other needles, three inches long, were required to arrest bleeding from small branches in the posterior flap. Bleeding having ceased, the flaps were brought together at once by means of wire sutures passed deeply through them. No other dressing was applied, and, beyond a very little oozing which only sufficed to form a crust at one part of the wound, no bleeding occurred for eight days. Thirty hours after the operation, two needles holding small arteries of the posterior flap were removed. Forty-two hours after the operation, the two larger ones and one of the remaining smaller ones were also taken away; the last could not be withdrawn, being caught by a suture. The patient continued to sleep and eat fairly, and the stump remained quiet, the small quantity of discharge drying into crust on the wound, until the 19th, when the stump began to swell, and the discharge became more copious, upon which the sutures and remaining needle were removed, and water-dressing was applied. The next day the surfaces sloughed. During the following four days the sloughs separated. Early in the morning of the 23rd, hæmorrhage came on for the first time; blood enough to soak the dressing had escaped before it was discovered. A needle was passed through the posterior flap as near as possible to the bleeding vessel, apparently a muscular branch. When this was done the bleeding ceased at once.

The patient, notwithstanding this loss of blood and sloughing of the flaps, continued to eat and sleep well; had a cool skin and clean tongue, up to the 26th, when he complained of sweating much during the night. His pulse was 80, and tongue furred. There was very little action in the stump itself, but the temperature rose to 102½°, and remained above 102° until his death; pulse also rising to over 100.

By the 28th the sweats were accompanied by chills; vomiting was frequent, and his breath assumed a peculiar odour.

Oct. 2nd.—His left shoulder became painful and swollen.

3rd.—Hæmorrhage recurred from the same point as before.

On the 4th he died much exhausted by this second loss of blood.

Post-mortem examination.—The brain, heart, lungs, and abdominal viscera healthy. One kidney, the right, only present; it weighed ten ounces. No peritonitis. All the larger joints were healthy, except the left shoulder, outside of which was a collection of pus, in considerable quantity, beneath the deltoid muscle. The synovial membrane of the joint was not congested, nor was there any fluid in its interior. The surfaces of the stump were pale, and free from granulation; the ends of the bones denuded of periosteum; the medulla pale and protruding at the end of the tibia. The posterior flap still retained the needle which had been a second time inserted. At this place the tissues were sloughy, and infiltrated with pus, forming small abscesses alongside of a vein and small artery, which were filled with clots and ulcerated in two places.—The arteries: The aorta, femoral, and popliteal and anterior tibial were quite pervious, and free from clot to the cut end of the anterior tibial artery. There was no inflammatory action external to the vessels. The posterior tibial artery was also clear internally to its cut end, but its lower part was matted to its accompanying veins by new tissue for six inches, in which small abscesses full of fetid pus were scattered. There was no communication between these and the interior of the vessels they lay amongst. Both tibial arteries were firmly closed by little plugs, one-tenth of an inch long, of plastic matter of bright-red colour, tightly adherent to their cut ends. So complete was the closure that water failed to pass out of the vessels when injected with moderate force, except at the collateral branches opened by dissection. There was no vestige of a clot in either artery between the plug and the next collateral branch, nor was the interior of the vessels at all stained with colouring matter of absorbed blood.—The veins: The vena cava and iliaca femoralis were clear as far as the juncture with the saphena; beyond that the trunk was obstructed by a soft pale clot as far as the juncture of the posterior tibial vein. This was filled with hard tough clot in its whole length. The anterior tibial vein was clear as far as it could be traced with the artery, and there had been no inflammatory action along its course. The saphena was also clear.

KING'S COLLEGE HOSPITAL.

CASE OF RADICAL CURE OF INGUINAL HERNIA: WIRE METHOD, WITH SETON THROUGH THE SAC.

(Under the care of Mr. JOHN WOOD.)

EXCELLENT results continue to be obtained from Mr. Wood's operation. The following case is especially interesting, as showing that a very considerable amount of suppuration following the procedure, and which might naturally be expected to be detrimental, had no unfavourable influence. We understand, indeed, that Mr. Wood does not regret the occurrence of this process, as the after consolidation is thereby frequently rendered more perfect.

W. H——, aged thirty-one, late an officer in the Confederate

army of America, was admitted on the 12th of October last for an oblique scrotal rupture of considerable size on the right side, of three years' standing, occasioned by excessive fatigue from riding while engaged on General Lee's staff in Virginia. The patient could never get a truss to keep up the rupture comfortably, and, consequently, determined to come over to this country mainly for the purpose of undergoing Mr. Wood's method of cure. On the 15th of October, the patient being under the influence of chloroform, he was operated on by Mr. Wood's wire method. A skin-deep oblique incision, about an inch long, was first made in the scrotum, and the fascia around separated to the extent of about two inches. This was next invaginated with the forefinger well up into the hernial canal, the edge of the conjoined tendon hooked up, and a Wood's hernia-needle passed along the finger and through the tendinous boundaries on the inner side of the opening. As the point raised the skin, the latter was drawn inwards, so that it was perforated by the needle an inch external to the puncture in the tendons. The end of a thick, silvered wire was then hooked on the needle, and drawn by it until it appeared in the scrotal incision. Then the needle, disengaged from the wire, was next passed on the finger so as to transfix the centre of Poupart's ligament, and brought out through the same puncture in the skin as before. The other end of the wire was then hooked, and drawn down into the scrotum. The disengaged needle was then passed across in front of the spermatic cord, and behind the sac, through the incision in the scrotum. The inner end of the wire was then attached and drawn back with it, behind the sac, and close across the cord. The two ends were then twisted up by four turns, and by traction upon the loop above, the wire enclosing the sac and scrotal fascia was drawn up well into the hernial canal, and secured by a few twists of the upper loop. A pad of lint was then placed under the ends of the wire, bent upwards so as to meet the loop, and the whole secured by a spica bandage.

After the operation there were no symptoms whatever of an unpleasant nature. A temporary difficulty was next day experienced in emptying the bladder, from pain at the groin produced by the necessary action of the abdominal muscles. He had very little pain when still after the first twenty-four hours. A great deal of induration followed, with, at first, inconsiderable suppuration. The wires were withdrawn without difficulty on the 28th, a fortnight after the operation. After this time the amount of suppuration discharged at the scrotal puncture increased, a swelling formed just above the testicle, and it became evident that the interior of the lower fold or fundus of the sac had suppurated. Mr. Wood, in accordance with a practice that he has successfully carried out in such cases, passed a seton of lint quite through and across the sac, one end passing through the scrotal aperture made by the wire, and the other far back in the most depending part of the scrotum. In a few days the swelling and suppuration had entirely disappeared, and a hard mass of induration occupied the whole extent of the hernial sac.

Nov. 15th.—At present the whole of the openings are healed. A good deal of the induration has disappeared, leaving the inguinal canal and superficial ring quite blocked up by adhesions, and the testicle free and mobile, and of its natural size. There is no impulse whatever on coughing, while standing, in the course of the inguinal canal; and the general abdominal impulse is rather less than on the opposite side, which is, as is common in these cases, a little weak and bulgy. He looks extremely well and feels very strong, and is about to be discharged, wearing a light truss of the horse-shoe pattern, recommended by Mr. Wood.

On the occasion of this operation a patient was shown in the theatre upon whom Mr. Wood had operated five years previously for the largest rupture he had ever dealt with. So perfect was the cure that the man had been able to do without a truss for upwards of two years, although working as a porter in Covent-garden market, an occupation involving much heavy lifting. Examination failed to detect any signs of a rupture having ever existed.

ST. MARY'S HOSPITAL.

COMPOUND FRACTURE OF THE PATELLA FROM A FALL UPON THE EDGE OF A SCYTHE; RECOVERY.

(Under the care of Mr. LANE.)

FROM the intimate connexion of the patella with the large articular surface of the knee-joint, compound fracture of this bone is always a very serious accident. It is an injury which frequently terminates in the death of the patient, unless amputation be performed early.* The fortunate result in the following case would appear to be owing in a considerable measure to the peculiar manner in which the accident happened. The wound was a clean cut, and therefore readily disposed to heal, and there was an absence of the laceration and bruising of tissues which so often accompany compound fracture of the patella.

The following notes were kindly supplied by Mr. Woodman, house-surgeon:—

Thomas L——, farm labourer, was admitted on July 6th, 1865, under the care of Mr. Lane. He is a healthy man, aged thirty-four. He states that while walking and carrying a scythe he slipped and fell, striking his bent knee forcibly against the edge of the scythe. He was unable to rise, but was lifted up by some men and conveyed to the hospital. He felt little pain, and lost but little blood. On admission, he was found to have a clean cut across the left knee, two inches and a half in length. On examining with the finger, it was found that the patella was completely divided a little below its middle, laying open the joint, from which synovial fluid escaped. The limb was put up in a M'Intyre's splint, and cold evaporating lotions were applied.

July 7th.—There is great pain in the joint, which is much swelled. Ordered twelve leeches, a linseed poultice, and the following pill twice a day:—Chloride of mercury, one grain; extract of acetate of colchicum, one grain; opium, three grains; also a saline mixture, with twelve minims of colchicum wine, twice a day. Broth diet, with one pint of beef-tea.

17th.—Is much better. The inflammation has gradually subsided. The inner half of the wound has healed; the outer discharges a little. To discontinue the pills and mixture.

19th.—Going on well, but very weak. Ordered quinine mixture, one ounce three times a day. To have ordinary diet, with a pint of porter.

20th.—Complains to-day of pain below the joint towards the inner side of the tibia, where an abscess seems to be forming.

28th.—The abscess was opened this morning.

Aug. 2nd.—The abscess discharges freely. The wound is now quite closed. The limb to be removed from the splint and placed on a pillow. To have four ounces of brandy.

7th.—Is very weak. The discharge from the abscess is very great. Ordered six ounces of brandy and two pints of porter; and to take ten minims of tincture of iron and one ounce of quinine mixture three times a day.

15th.—Still a good deal of discharge. To-day an abscess was opened in the popliteal space, affording great relief to the patient.

From this date the man quickly and steadily improved in health. On August 28th there was still a slight discharge from the opening in the popliteal space. There was no pain or tenderness, and he had considerable motion in the joint. The fragments of the patella were movable, but seemed to be firmly united by fibrous tissue at an interval of seven-eighths of an inch. The cicatrix was three-eighths of an inch below the upper margin of the lower fragment.

WEST LONDON HOSPITAL.

COMPOUND FRACTURE OF THE ANKLE-JOINT; AMPUTATION; GANGRENE; DEATH.

(Under the care of Mr. TEEVAN.)

THE notes of the following case are by Mr. Jackson, house-surgeon.

John H——, aged seventy-nine, one of the few surviving veterans of Trafalgar, was admitted into the hospital at eleven A.M., Oct. 20th. Has evidently been a powerful man, but is now rather emaciated and of cadaverous aspect. On the evening before his admission into the hospital he attempted to get out of an omnibus in motion, and whilst so doing slipped and fell into the road. He was unable to rise, and was carried to his home, and thence on the following morning to the hospital.

On admission, his left foot was found much everted, and nearly at right angles to the leg. There was a wound, of the size of half-a-crown, over the inner ankle. The tibia at that spot was quite bare, and a probe could be passed into the joint. The foot had carried away the internal malleolus with it, and there was also a fracture of the fibula about three inches above the external malleolus. The patient was in very

* See Cooper's Dictionary of Surgery, 1861, vol. i., p. 735.

good spirits, but his pulse was feeble, and he complained of much pain in the part. Under the use of stimulants his pulse rallied towards the evening.

At eleven P.M. the same day, Mr. Teevan, after consultation with his colleagues, amputated the leg in the lower third. On examination, the external and internal lateral ligaments were both found perfect, but the latter had carried away with it the internal malleolus. The fracture of the fibula was now ascertained to be comminuted. The malleoli were so brittle that they could be cut with a knife; the compact structure of the tibia and fibula was, however, extremely dense.

Oct. 27th.—Slept well last night; is free from pain; pulse good; but the tongue is dry and brown. The stump looks well. He is taking Liebig's "extractum carnis," and plenty of stimulants.

28th.—Wandered at times last night. The anterior flap is dusky-looking in places, and the epithelium is peeling off. Pulse feeble; countenance looks very depressed.

29th.—The anterior flap is quite gangrenous, and the posterior one is evidently commencing to lose its vitality. The patient is very prostrate, and is at times unconscious. During the day the gangrene continued to spread, and the man died at eight P.M.

Mr. Teevan remarked that, although nearly every tissue in the man's body had suffered from age, yet the ligamentous structures were still perfect; and that it would have been quite useless to perform a second amputation, on the appearance of the gangrene, as the patient was so very old, and had so little reparative power left.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, JAN. 23RD, 1866.

DR. ALDERSON, F.R.S., PRESIDENT.

A CASE OF ACUTE UNCOMPLICATED MYOCARDITIS, IN WHICH THE DISEASE WAS DIAGNOSED DURING LIFE.

BY C. B. RADCLIFFE, M.D., F.R.C.P.,

PHYSICIAN TO WESTMINSTER HOSPITAL AND TO THE NATIONAL HOSPITAL FOR PARALYSIS AND EPILEPSY.

THE case which forms the subject of this article is an example of a grave affection, of which there is little, if any, certain knowledge: acute uncomplicated myocarditis, or in other words, acute inflammation of the muscular structure of the heart, without any inflammation of the endocardium or pericardium.

The patient was a fine, stout, strong, married man, middle-aged, a varnish maker by occupation. For six weeks he had had occasional attacks of sharp pain at the pit of the stomach, and shooting thence into the left arm—attacks evidently of the nature of angina pectoris. In other respects he thought himself well in health, and he was well enough to follow his daily work, and to get about with little or no discomfort up to the day before his death.

When seen for the first time (July 27th, 1865), the indications of the disorder evidently pointed to a very weak heart. The pulse was extremely feeble, and somewhat slow, but not irregular. The hands were cold and clammy—remarkably so. The first sound of the heart was absent. The cardiac impulse against the walls of the chest could not be felt. The second sound of the heart could be heard; but faintly only, and several times (in an examination extending over several minutes) it was distinctly reduplicated. There were no morbid sounds of any kind whatever. In the attempt to detect the cardiac impulse the patient winced more than once, and complained of feeling sore and tender at the part. There was no arcus senilis; the arteries were to all appearance free from atheromatous deposits, and, in short, the only indications of physical disorder were those which have been mentioned. The first attack of pain happened at a time of sudden and severe mental trouble. Previous to this the health had been in all respects excellent.

The patient was seen for the second time on the following day, and then he was dying. He was sitting awkwardly on the edge of a chair by the side of the bed, supported by his wife. On suggesting that his posture was a very uncomfortable one, he gasped out, "I must keep as I am—I dare not stir." He had been in this position for ten or twelve hours, literally without moving in the least. His face was pale and ghastly; large beads of sweat stood out on the forehead and went trickling down the face; his extremities, upper and lower, were clammy, and corpse-like as to paleness and coldness. The pulse at the wrist had failed altogether. His breathing was short, shallow, and gasping, and with it was a rattle of which the significance could not be mistaken. His mind was clear and collected: he complained of sickness, and said he knew that he was dying.

The history given of this sudden change was this: that he got out of bed to pass urine in the middle of the night, after several hours' quiet sleep; and that while up for this purpose the pain at the pit of the stomach returned in an unusually severe form, with cold perspirations, and with a feeling of deadly faintness. For the next four hours this pain continued without intermission, even without alleviation, and then it ceased suddenly, and the condition as suddenly changed to that which has been described.

The post-mortem examination was made by Dr. Willis and Dr. Bazire twenty-four hours after death. In the cavity of the pericardium were nearly two ounces of serum, reddened by blood, but having no flakes of lymph in suspension. The pericardium itself presented no traces of inflammation, old or new; its visceral layer was intensely injected with ramifying capillaries filled with dark blood, but without ecchymoses, and elsewhere it was of the natural colour and character. The heart was dilated and flabby. The muscular structure of both ventricles, and in a lesser degree of both auricles also, was soft and friable, of a mulberry-juice colour, almost black in fact, contrasting in this respect, in a very marked manner, with the natural redness of the muscles of the chest-walls. It broke down readily under the finger like hepatized lung. As seen with the naked eye, it did not appear to be fatty; but there were considerable deposits of fat about the exterior of the heart. The endocardium and all the valves were quite healthy, and so also was the aorta. The left ventricle contained some loose, very dark clots of semi-coagulated blood; and in the right ventricle were some fibrinous, but not decolorized, clots adherent to the walls. Upon lifting up the heart by a portion of the right ventricle, the muscular structure broke down, and tore like wet paper by the weight of the heart itself. Unfortunately, no microscopic examination was practicable.

The grounds upon which the diagnosis was made were in the main these:—The history of the disease seemed to point to acute rather than to chronic disease—to begin suddenly in a way which suggested the idea of a "broken heart." There was no sufficient reason to suspect pericarditis or endocarditis, for there were none of the morbid sounds which mark the presence of these inflammations. So far seemed plain enough. It seemed, moreover, that the main symptoms were easily explainable on the supposition that the muscular structure of the heart had been attacked by inflammation. Inflammation of the muscular structure of the heart, as a matter of course, would weaken the muscular powers of the structure, and this weakening would account for that failure in the action of the heart which was the most prominent symptom. Moreover, the same weakening would carry along with it, if sufficient in degree, absence of the first cardiac sound, and absence likewise of the usual cardiac impulse. Nay, it seemed as if the symptoms present—sudden failure in the action of the heart, with loss of its first sound and of the impulse of the apex, with some tenderness on pressure in the intercostal spaces in the cardiac region, with some pain, but without the severe pain of pericarditis, without the morbid sounds of pericarditis or endocarditis, and without arcus senilis, atheromatous vessels, or other signs, good or bad, to point to common fatty heart—were all the symptoms and signs one had a right to expect in inflammation of the muscular structure of the heart. At any rate, it was on these grounds, be they sufficient or insufficient, that the diagnosis was made; and it was this diagnosis which led to the post-mortem examination, for if it had not been so, the body—such was the opposition of the friends—would have gone to the grave unexamined.

The PRESIDENT objected to the coinage of new words for cases of disease, and thought in the case just read, carditis would have been a sufficiently distinct term.

Dr. RADCLIFFE referred to Dr. Stokes as his authority for the word he had used, "myocarditis."

COLLEGIATE LIBERALITY.—The Council of the Royal College of Surgeons of England has just distributed upwards of 570 volumes of the valuable illustrated Catalogue of the Museum of the College to the libraries of our provincial hospitals, in addition to complete sets to the libraries of several foreign universities.

Reviews and Notices of Books.

Clinical Notes on Uterine Surgery, with Special Reference to the Management of the Sterile Condition. By J. MARION SIMS, M.D., late Surgeon of the Woman's Hospital, New York, &c. London: Robert Hardwicke. 1865.

THE perfection of scientific writing is that in which the value of words is solely appreciated as they serve to convey clear ideas. To arrive at this is one of the rarest accomplishments, and few men have succeeded so perfectly as the author of this important book. Before commencing an analysis of its contents, it is only just to say that its calm clearness of style and entire absence of affectation, the simplicity, the fearlessness, and often the homely plainness with which the most delicate and the most important subjects are treated, give a peculiar charm to its perusal. Few works have ever issued from the medical press of any country which are more deeply interesting than this. No small part of this attraction is probably due to the entire absence of trickiness of any sort; the manly honesty with which difficulties and occasional failures are avowed, and the *entrain* with which the clinical history is written of the origin of those many improvements in uterine therapeutics by which Dr. Marion Sims has inscribed his name in the rolls of fame. The title of the book truly, although very modestly and incompletely, describes its character. It is a collection of bedside studies of the uterine diseases of which it treats, notable for their accuracy, and continually challenging our admiration for the sagacity and the originality of their author, the fertility of resource, the unfailing patience, the successful adaptation to new purposes of simple means, the exact perception and clear statement of the vital points of every case. It is a great privilege to be admitted thus intimately to the discussion of principles and the relation of practice by a surgeon whose hitherto unwritten experience is rich in the ample stores of a most varied knowledge and in admirable rules of procedure in a class of cases yet very imperfectly understood; but that privilege is enhanced by the care and candour with which the whole clinical history of the cases is told, and the constant explanation of the grounds of procedure by a reference to that best of all authorities—Nature.

For the first time in the history of medicine, the sterile condition is here subjected to a full and philosophical analysis, complete as far as the advanced knowledge of our time permits. The causes on which sterility depends are studied in a natural order, and the manner of investigating them and their proper treatment indicated. These causes are most various:—

"The trouble in one case may depend upon mere contraction of the os; in another, upon malformation of the same—in another, upon engorgement of the cervix—in another upon elongation—in another upon hypertrophy—in another upon simple induration—in another upon curvature of the canal of the cervix—in another upon polypus—in another upon a fibroid—in another upon malposition of the uterus—in another upon some anatomical anomaly or malformation of the vagina—in another upon vitiated secretions of the cervix—in another upon those of the vagina, the one generally acting mechanically, the other chemically—in another upon the absence of spermatozoa; while others may be complicated with several of these anomalies, all subjects of study and investigation."—pp. 2, 3.

It is by the intelligent discrimination of these causes and their appropriate treatment that sterility is rescued from the territory of empiricism, and brought within the reach of rational and enlightened medicine. The order in which Dr. Marion Sims marshals the inquiry is indicated in the following admirable and lucid enumeration of the conditions essential to conception. We cannot omit them, for the surgeon who clearly impresses them upon his mind in the investigation of the sterile condition in any patient will have advanced half-way to success:—

"1. It occurs only during menstrual life.

"2. Menstruation should be such as to show a healthy state of the uterine cavity.

"3. The os and cervix uteri should be sufficiently open to permit the free exit of the menstrual flow, and also to admit the ingress of the spermatozoa.

"4. The cervix should be of proper form, shape, size, and density.

"5. The uterus should be in a normal position—i. e., neither anteverted, nor retroverted to any great degree.

"6. The vagina should be capable of receiving and of retaining the spermatic fluid.

"7. Semen, with living spermatozoa, should be deposited in the vagina at the proper time.

"8. The secretions of the cervix and vagina should not poison or kill the spermatozoa.

"I lay these down as postulates, embracing the general principles or laws most favourable—indeed, essential to fecundation; and I propose to take them up seriatim, and to show, from clinical experience, wherein the sterile condition differs from the fecund, and to point out, so far as we know, the surest methods of relief."—pp. 5, 6.

In the first section Dr. Sims is brief; but he touches no subject in this book on which he does not throw fresh light, and he contributes to our knowledge two remarkable cases of conception without menstruation, and valuable examples illustrating errors in diagnosis arising from anomalous conceptions.

The second section is one of the greatest value. It deals with disordered menstruation as related to sterility. Dr. Sims goes always to the heart of his subject, and he treats this matter with characteristic minuteness and a skill which never fails him. He illustrates from clinical experience menorrhagia from granular erosion, from fibrous engorgement of the cervix, from fungoid granulations, from polypus, from fibrous tumours, from inversion of the uterus, &c. In the narration of these cases and the exposition of the means of dealing with them, the surgical resources of the author are most conspicuously displayed, and each case is a study. The part which is played by polypi of the uterus in producing menorrhagia, the means of exploring them, of determining their precise site and attachment, are laid down more completely than they have ever been before. By the use of Dr. Sims's peculiar method of uterine examination, which is clearly described in the first part of the book, and by the use of the sponge-tent for dilating the cervix prior to exploration, he shows that the cavity of the uterus may be investigated with ease, and the morbid conditions which are present determined with a precision which a few years since would have been deemed not only marvellous but incredible.

Of the manner of using the sponge-tents, the manipulations, the precautions, and the little instrumental adjuncts which are desirable, Dr. Sims treats with a detail which is never wearisome, because it never degenerates into mere verbiage. Every word has here, as throughout the book, its specific object and significance; and although in one sense a remarkable example of how much an accomplished physician may find it necessary to say upon an apparently (not really) trifling subject, in another it is a perfect specimen of true conciseness. It would hardly be possible to omit a sentence without more or less serious loss. Dr. Sims illustrates the subject of polypus with great care, gently, and most usefully. "Time was," as he truly says, "when women died of polypi without any effort being made for their relief. This is not so now. No delicate operation is easier; none more successful." We fear, however, that it still not seldom happens that the cause of menorrhagia remains long undetected, and that patients are unrelieved from the failure to detect them; and the complete illustration which is here given of the means of exploration and treatment will be of the greatest service to every practitioner, and is full of instruction even for the most experienced. The subject of inversion of the uterus is treated with fulness and originality. The author gives an interesting account of his experience, and a theory of the method of reduction which is well conceived and carefully thought out. The paper recently read by Dr. Sims at the Obstetrical Society

sufficiently explains his views on this subject; and the following paragraph illustrates its bearing on the subject of sterility:—

"The patient in whom I was so fortunate as to restore the organ after twelve months of inversion, subsequently conceived; and thus we see the important bearing of this operation upon the subject of sterility. Even Dr. Tyler Smith's successful case of reduction after nearly twelve years of inversion, was followed by conception; and these two cases are, I think, sufficient to warn us against a too hasty resort to the operation of amputation."

With this quotation we must for the present close, having, however, only half noticed a small, and that, perhaps, not the most important, part of this suggestive and remarkable work.

We cannot omit, however, to notice the graceful allusion which the author makes to the political circumstances which have induced him to take up his residence in England. He has earned the personal not less than the scientific respect of the profession in this country, and that good opinion will be increased by this volume.

We must say, too, a word in favour of the technical getting-up of the book, which is universally good; and of the excellence of the illustrations, taken from nature, with which it is liberally illustrated. Dr. Sims evidently knows well the value of the Horatian maxim, and seeks to instruct his readers by the aid of figures as well as by text; so that almost every other page is enriched with an engraving. They are all original; they do great credit to the artists, and still more to the author, adding considerably to the value of the work.

ON THE APPLICATION OF OZONE TO SANITARY PURPOSES.

To the Editor of The Lancet.

Sir,—I hope on a future occasion to be allowed an opportunity of laying before your readers a paper embodying the results of two years' ozonometric observations, made chiefly with a view to ascertain the influence exercised by atmospheric ozone over epidemic diseases. My present object in addressing you is to request that you will allow me space in your columns to describe a very simple and inexpensive method of generating ozone and of applying it to sanitary purposes.

Schönbein found that a little pure ether put into a bottle filled with oxygen or atmospheric air, and exposed to diffused light, the bottle being occasionally shaken, had partially changed its nature after a lapse of four months. Although producing no action on litmus paper, it discharged the colour of a solution of indigo, converted phosphorus when immersed in it into phosphorous acid, eliminated iodine from iodide of potassium, &c.; thus showing that it had acquired many of the properties of ozone. This discovery led to a mode of forming ozone by moistening the interior of a bell-glass receiver, or a large-mouthed bottle, with ether, and plunging into it a glass rod previously heated in the flame of a spirit lamp. On experimenting, some few weeks since, with ozone formed in this manner, I was surprised to find that, at the expiration of ten days, the bottle I had used, although open and freely exposed to the air, was still highly ozonised. I then ozonised a large glass vessel by the same process, and in the course of a few minutes thoroughly rubbed the interior with a towel, and found that, although the towel had become ozonised, the glass vessel still retained its power of liberating iodine from iodide of potassium, of decolorising sulphate of indigo, of destroying sulphuretted hydrogen, &c. These properties were retained by the glass vessel and the towel for several days.

Viewing ozone as oxygen in a dynamical condition, its increased activity giving it the power of rapidly converting the products of animal and vegetable decomposition into innocuous compounds, I began to test the power of this chemical ozone in a privy, the atmosphere of which was highly charged with sulphuretted hydrogen and probably other deleterious gases. Before commencing operations, I placed a vessel containing a weak solution of permanganate of potash on the seat, the lid being raised. In an hour the colour was perfectly destroyed. I then placed large glass jars, which had been ozonised by means of ether and a hot glass rod, in several parts of the privy; and by this, and other methods about to be described, I have kept the atmosphere so pure that a solution of permanganate of potash of the same strength as that first used will retain its colour for several days. On finding that cloths could be ozonised by merely rubbing them over an ozonised surface, I began to suspect that heat was not absolutely necessary, and on pouring a small quantity of ether into a wide-mouthed bottle, it immediately afforded ozonic reaction, which continued active for a considerable time. I have since found that sheets, blankets, beds, clothing, bandages, lint, carded cotton, paper, and many other materials may be ozonised by simply pouring a small quantity of *a certain kind of ether* over them. Unfortunately I am not able to describe what that particular kind of ether is, but believe it to be very old ether which has absorbed a good deal of oxygen, that process having been favoured by exposure to light. Out of upwards of thirty samples of ether which I have examined, I have only found one to answer the purpose thoroughly, and this I know was imported into the colony about eight years since. Of the other samples three or four answered tolerably well, and many gave no ozonic reaction at all.

It is well known that oil of turpentine has the property of generating ozone. How it does so has not been satisfactorily explained. Some chemists consider that the oxygen of the atmosphere is converted into ozone by contact with the vapour of the turpentine; but this, like everything connected with ozone, seems to be veiled in mystery. I have found that many substances, particularly those which are known as disinfectants, will, under certain conditions, generate ozone. I have succeeded with the vapour of cajeput oil, carbolic acid, creasote, pyroligneous acid, kerosine, naphtha, coal-tar, and chloroform, the reaction from chloroform being very feeble.

The question naturally occurs, Is it really ozone—active oxygen—that is generated by my simple process? I believe it for the following reasons:—It rapidly destroys sulpuretted hydrogen; it converts sulphite of lead into sulphate; it liberates iodine from iodide of potassium; it possesses powerful bleaching properties, and quickly decolorises a solution of sulphate of indigo; it oxidises iron and silver when they are slightly moistened; it coagulates albumen and casein, altering their colour, and giving to them a greenish tinge; and it induces intense headache and sore-throat when it is breathed for any length of time.

The normal amount of ozone in the atmosphere has not yet been determined. It must, however, be very small. It has been given, I think by Dr. Bérigny, of Versailles, as one part in ten thousand. It is known to be more plentiful in the open country than within the confines of towns and villages, and it is also known to be almost entirely absent from inhabited houses.

Now, it appears to me quite possible that the sanitary condition of hospitals, factories, schools, and indeed of all establishments in which the atmosphere is liable to become vitiated, may be greatly improved by the occasional presence of artificially generated ozone.

I am, Sir, your obedient servant,

Geelong, Victoria, Sept. 1865. John Day, M.D.

EXCISION OF THE TONGUE.

To the Editor of The Lancet.

Sir,—I read with much interest the sequel to Prof. Syme's case of complete excision of the tongue. He comments upon the almost perfect power of speech after the organ of speech *par excellence* had been totally removed, and observes that he is not aware of any case on record in which the power of articulation remained so perfect.

During the winter of 1857, I remember seeing in the reception hall of the Imperial Academy of Medicine a man from whom M. Ricord had excised the entire tongue some considerable time previous. I looked into his mouth and saw that there was not a remnant of the tongue left. He was of middle age, well nourished, and contented-looking. I was inexpressibly surprised upon hearing this man talk fluently and with perfect ease, and, as far as I could detect, without any deficiency whatever in the power of articulation.

I am, Sir, yours faithfully,

William MacCormac, M.D., F.R.C.S.I.

Howard-street, Belfast, Jan. 29th, 1866.

THE LANCET.

LONDON: SATURDAY, FEBRUARY 3, 1866.

THE hopes raised by the many points of resemblance between cattle plague and small-pox pointed out by Dr. MURCHISON and Mr. CEELY, and confirmed by the observations of other competent authorities, have not received that practical realization which all must have desired for them. It remains indeed yet uncertain whether the rinderpest be or be not a form of bovine small-pox. Dr. MURCHISON has exploded the long-received opinion that it is either typhus or typhoid of horned beasts. There seems no doubt that it is an exanthematous disease, and very little that it is of the small-pox type. The most important question has, however, we fear, now been settled adversely. Vaccination does not seem to exercise a permanently protective influence against this disease in cattle, any more than it does against the small-pox of sheep. The kind of experiments which were to be tried in order to obtain a solution of that question suggested themselves immediately that the analogy between small-pox and rinderpest was pointed out. The first thing to be done was "to produce cow-pox in cattle by inoculating them, on the one hand, with vaccine lymph, and, on the other, with the matter of human variola; and afterwards to ascertain if they be proof against the prevalent plague, or if the course of the disease be thereby modified." The first statements, forwarded from all sides, were of the most favourable kind; but these were obviously insufficient to establish any conviction, and we have had to wait till now to obtain data for a positive judgment. Unfortunately, the fears raised by the communication last week have been verified, and the negative results obtained during the present week can leave no doubt that vaccination will not realize our hopes. It seems to have the power of conferring a temporary immunity, but one which does not survive the immediate action of the vaccinial virus.

The deaths of the vaccinated cows in Mr. TOLLEMACHE'S herd, and those at the Royal Veterinary College and at the Albert Veterinary College, put an end to all hopes of arresting the pest by this means, and we must still restrict our efforts to check it to severe and absolute isolation. We are driven back to the sanitary cordon and the poleaxe as practical measures. Scientifically, there is still much room and need for further investigation; and we can but hope that the inquiry will not be abandoned, but that some will still devote themselves to the effort to discover by patient experiment whether the rinderpest has not a pathological opponent capable of neutralizing its virulence, and whether a prophylactic may not yet be found. Of any large measure of success by treatment all experience forbids us to form anticipations.

The renewed attention directed by these researches to the subject of vaccination will be fertile in another way. We have learned, in the first place, that vaccination of the cow from the human subject is an operation by no means so difficult as it has been represented to be; and, in the second place, we are led to review the present state of our knowledge of the relation between cow-pox and small-pox. Certain views have long held an authoritative position. JENNER himself, the immortal discoverer of vaccination, held that cow-pox was small-pox modified by the constitution of the cow. Foreign and English experimenters have related results which confirmed experimentally the Jennerian theory. Mr. CEELY and Mr. BADCOCK especially have assured us that the inoculation of the cow with the matter of human small-pox produces ordinary vaccinia, and that children may be successfully vaccinated with the lymph thus obtained; while it is stated that some fourteen thousand persons at least are known to have been vaccinated with lymph thus procured.

It is true that doubts have been expressed on this subject, and Dr. MURCHISON quotes a remarkable passage from the writings of the late Dr. GREGORY, for many years physician to the Small-pox Hospital, in which, with a full knowledge of Mr. CEELY'S experiments, he says, "I demur to the theory of identity, and hold that small-pox and cow-pox are antagonistic affections—that cow-pox, instead of being, as Dr. BARON maintains, of a variolous, is, in fact, of an *anti-variolous* nature." Dr. GREGORY mentions a striking case in which small-pox was inoculated within the areola of a vaccine pustule, and vaccinia and variola were developed simultaneously, which it is difficult to explain supposing that they are identical and not antagonistic affections. A remarkable instance also is pointed out of an American physician having inoculated a cow with small-pox with the view of procuring fresh lymph, and then producing, not vaccinia, as he had anticipated, by his subsequent vaccination of human subjects from that cow, but contagious small-pox, which was fatal in three cases. A committee of Lyons physicians, who have published a report based upon an extensive series of experiments, maintain the same conclusions as Dr. GREGORY—that small-pox and cow-pox are two distinct affections which are mutually antagonistic. Variolation of the cow has in their hands produced variola in the cow, and not vaccinia; and children vaccinated from such cows they describe as suffering from a modified form of small-pox, which in two instances was apparently transmitted by infection to persons in health. Moreover, they succeeded in variolating cows, after their fashion, without any difficulty; while Mr. CEELY and Mr. BADCOCK were only able to obtain what they considered essential—namely, a vaccine vesicle—in but a very small proportion of their cases. What interpretation can we put upon these apparently conflicting statements? Few people were, perhaps, prepared to find still existing so great a disparity of opinions and conclusions respecting a practice so old and well established as vaccination, and it will be very interesting to hear what Mr. CEELY and Mr. BADCOCK have to say upon the subject.

A FEW days since a meeting was held in the City, presided over by the LORD MAYOR, and at which "assisted," as our French neighbours say, some well-known members of literature, science, and politics, in connexion with a subject frequently alluded to in these columns. As it is a subject that admits of yet further consideration, we take advantage of the meeting in question to bring it again in all its importance before the notice of our readers. Let us say *in limine*, then, that grown men are beginning to find that they as well as boys must have playgrounds and fresh air to breathe in, or the old-fashioned British "spleen" will be as rife as the cattle

plague. Our City and suburban gentlemen are beginning to see with alarm the gradual diminution, year by year, of the pleasant greens and commons on which in their earlier years they played in the holidays, in after days took agreeable saunters on summer eves and Sundays, and more recently from which they spied a bit of green, and inhaled some fresh air as they rode past it on the stage, or whizzed by it in the train on their way to the City and its smoky purlieus. Turf was seen to become gradually mud or gravel, or a delightful and invigorating soil of oyster-shells, old shoes, and broken bottles. Furze bushes became slowly metamorphosed into heaps of mortar, and hawthorns into piles of bricks. Where stood the windmill was now a bran new public-house, and the pond once fished in was now impossible to be "fished out." In fine, what with railways, suburban villas, almshouses, new roads, enclosures, and other similar improvements, it was found that the commons and open spaces around the metropolis were becoming so "small by degrees and beautifully less," that to our present little boys and girls under five years of age, their existence would be only mythical unless something was immediately done to arrest the progress of the innovator.

Such being the case, the Commons Preservation Society was formed, as an association under influential auspices to assist in preserving the commons and greens of our suburban localities, and to promote the passing through Parliament of the necessary measures for defining and amending the law in accordance with the resolutions of the Committee of the House of Commons on the subject. It being very clear that the march of the destroyer was daily getting more rapid, and that those who were to profit by his advances were becoming more wary in providing themselves with the legal protection and powers by which his step could be advanced, whilst at the same time this was apparently the last object they had in view, it was determined to act at once, so that the way should be clear by the opening of Parliament. Therefore a great City meeting was forthwith convened by the Commons Preservation Society. Most opportune was this meeting, and most fortunate that its proceedings have been widely made known, since nothing but a clear exposition of the slow and crafty way in which our common-lungs were being consumed appeared to be sufficient to rouse the model British taxpayer. But the "murder is out now," and we do not think that the metropolitan "John Bull" will any longer stand calmly by and see his paddocks turned into brick-fields. It is true this is not the first time public attention has been called to the gradual destruction of our free and open spaces. We all remember the Wimbledon Common business, and the little job that was meditated in reference to the common at Tooting. Whilst over Wandsworth and Battersea the poor metropolitan botanist had long wept in despair, the speculative builders of Thames-side were only waiting the word to cover Hampstead Heath and its Vale of Health with rows of buildings. In 1864 a resolution likewise was moved in the House of Commons by Mr. DOULTON, to the effect that it was the duty of her Majesty's Government to take steps for the preservation of such places as we have named; and, after a debate and a division, the motion was carried by a large majority. A Select Committee was afterwards appointed too, and union with the Metropolitan Board of Works formed. But we may be sure that if it had not been for the new Association, and its meeting last week in the City, with a determination for immediate and vigorous action, we might have said "good-bye" to our last acre of degenerating village green.

What has been done, we presume, must remain *in statu quo;* but not one inch more of enclosure or appropriation must there be for any purpose but for the permitting of Nature's wildest fits of turfy and furzy *abandon* and for the unbridled licence of the ducks and geese on the village pool. Our open spaces must be kept sacred if we do not wish to die of apnœa. It is bad enough already for ourselves. But what will it be for future generations? In fifty years, according to the average rate of increase since 1801, the metropolitan police district will contain 8,532,000 persons. Where is their fresh air to come from? Where are their children to take exercise? We are assured likewise that sixty years hence, supposing we go on ignoring Mr. MALTHUS as we now do, the inhabitants of our dingy city and the dwellers under its lowering and heavy atmosphere will be so closely packed together that they must be bound over to keep the peace by the obvious consideration that there will not be room enough for them to quarrel.

By the Enclosure Act of 1845, it is provided that no common shall be enclosed within fifteen miles of London, and within a certain distance of towns of a specified magnitude, without the previous sanction of Parliament in each particular case.

We not only fully agree with Mr. SCOTT, the City Chamberlain, who said that "he was of opinion that enclosure should be stopped within an area of twenty miles' radius," but with Mr. LOCKE, M.P., who, whilst admitting that lords of manors had certain rights, said "they had no right—as a matter of right—to call upon the Enclosure Commissioners to enclose a common and hand it over for use in precisely the same position as ordinary property." Looking at this question of preserving open, wild and free, the commons, greens, &c., near London, from a medical point of view, too much stress cannot be laid upon its most rigorous and immediate furtherance. The people are half choked and suffocated already, and want more room to breathe in given to them, rather than to have any modicum of space that remains taken away. Lords of manors, speculative builders, grasping townspeople—like those of Epsom,—and railway levellers must not have it, in this respect, all their own way. Against these potent enemies of one department of our social well-being the Commons Preservation Society will, no doubt, be able to make a vigorous stand. But whilst it does this, it must not forget to keep a sharp look out on that vallanously cunning system known as the "sweating of commons," by the process of the rolling fence, or the gradual deterioration of their surface by the digging of gravel-pits, by making dust-heaps, and the cutting of them up slowly but surely by a network of cross and intersecting roads.

AMONGST the host of "home" subjects that are about to engage the attention of the House of Commons during its commencing session, few will claim a more general interest amongst all parties than the ultimate fate of Greenwich Hospital. The Bill relating to that institution, with its princely revenue and noble buildings, became law last year, and has since taken effect. Very few of the many old seamen who then called its walls their home are now left therein; and those who know the place well, and have loved it most, mourn over its forsaken rooms and desolate precincts. The besom of Reform, for good or ill, has swept away its former inhabitants;

and we can no longer show, in its animated aspect, to foreign visitors and country friends, that which was once the grandest asylum amongst the many of which England can boast. But the future use of this great mass of buildings is a matter for grave consideration. It is important that its occupation should be speedy, for it would be a reproach to the nation that these walls should be tenantless a month longer than is absolutely necessary. But it is equally important that occupancy should be given to that section of the community whose claims are closest and whose need is greatest. The Lords of the Admiralty have at present given no sign as to their views about the appropriation of the building; and we believe that, as the law of its governance at present stands, nothing can be done without a general vote of the House of Commons. The claims of the mercantile marine to a participation in the benefits of Greenwich Hospital were discussed in the columns of this journal when the Bill relating to that hospital was before the House. During the last half century home and shelter have been found by the Admiralty for the sick sailors of our merchant navy, the ships *Grampus*, *Dreadnought*, and *Caledonia* (rechristened *Dreadnought*) having been lent to the Seamen's Hospital Society for that purpose. In the early part of the past year the Committee of this Society, alive to the glaring evils of a floating hospital, as pointed out by their medical officers, came to a resolution to give up the ship, and to find a home on shore. Greenwich Hospital has now become vacant, and the Committee of the Seamen's Hospital Society, as representatives of sick and disabled merchant seamen, ask of the Admiralty a home therein, as an equivalent to that which has hitherto been granted to them afloat. The cause of the "sailor" community is strengthened by the fact that its members have contributed for many years to the funds of Greenwich Hospital, and have received from that institution no benefit whatever. An annual income of upwards of £1000 was granted by Parliament (through the Board of Trade) towards the support of the *Dreadnought*, which sum was entirely taken away in the year 1853 by the passing of the Mercantile Marine Amendment Act. By this means the *Dreadnought* was at once deprived of nearly one-sixth of its income, at a time when, from the annually increasing commerce of the port of London, it was (as it still is) ill able to bear such a loss.

If the Lords of the Admiralty have no special scheme of appropriation for Government purposes, we cannot but think that the facts above stated constitute a very strong *prima-facie* claim for the occupancy of Greenwich Hospital by our sick seamen. The claims of this too-neglected class on all the aid that can be given by our Government, as well as by individuals, cannot be overrated. We know full well, from reports on scurvy and other sick returns, how far inferior, both in *physique* and *morale*, must be the condition of these men as compared to those occupying an analogous social position on shore. If, as it would appear, there be insurmountable difficulties, known only to the Board of Trade, in legislating for the health of sailors afloat, let us at all events provide, when they return, a home and hospital easily accessible to them all, and worthy of that nation whose ships are found on all the seas of the known world. In the absence of regular Government occupation, the House of Commons can hardly resist this request of the Seamen's Hospital Society; and the support of the independent members, including that of our medical representatives, is likely to be cordial and sincere. We should be heartily glad to see this noble structure devoted to uses so practically and permanently philanthropic.

Medical Annotations.

"Ne quid nimis."

OPHTHALMIC DEPARTMENTS.

A WRITER in the *Ophthalmic Review* has lately put forth a suggestion which we commend to the favourable notice of the profession. It amounts to this: that the various provincial hospitals scattered throughout England should follow the example already set them in London, and should establish special arrangements for dealing with cases of eye disease and of weak or impaired vision. It appears that in nearly all localities, whether agricultural or manufacturing, there is a very great amount of disorder of this kind among the poor; and, at present, that it is neither relieved to anything like the extent it ought to be, nor made available by the profession for the advancement of knowledge. To some extent this is true even of absolute diseases of the eye; but it is true to a far greater extent of the various imperfections of sight depending upon faulty formation of the visual organs. In such cases the sufferers, among the poor, are usually ignorant that their condition admits of relief, and do not think of themselves as fitting subjects for medical or surgical interference. Hence they never resort to general hospitals as such, and very seldom to private practitioners, who, again, will not often incur the trouble and expense of providing themselves with the means of accurately testing vision, means for which they would have only occasional employment. It is greatly to be wished, we think, that the public and the profession should alike learn, by experience, that defects of sight fall within the legitimate province of surgery, and that the use of spectacles should be as much under professional control as the use of medicine. In localities where ophthalmic hospitals exist, persons suffering from defects of sight soon resort to them; but ophthalmic hospitals are open to many of the objections that are urged with so much force against special hospitals generally, and to which we ourselves have so often given expression. To the organization of an ophthalmic department in connexion with a general hospital there can never, so far as we can see, be any objection; and, wherever there is room for a general hospital to exist, there is room for an ophthalmic department to be a great public benefit, and a great source of additional sympathy with and support to the institution as a whole, at a cost that would be altogether insignificant. In the present transitional and rapidly growing state of ophthalmology, it would usually be necessary to place the ophthalmic department under the care of a special and generally of an additional surgeon, because the patients required could only be got together by making a distinct department, and because the time requisite for examining them would usually be far greater than the surgeons engaged in the general work of an hospital could possibly bestow upon a numerous class of new cases. Moreover, where a single patient would often require from ten minutes to half an hour, it would be improper to keep the general body of out-patients waiting while the ophthalmic cases were receiving their due share of attention. It would also be the duty of the ophthalmic surgeon to keep himself thoroughly conversant with the successive advances in his art, and this duty alone, at the present rate of progress, would involve no small amount of labour and study. We think it would not be the least of the benefits that would attend upon "ophthalmic departments" that they would compel

a large number of surgeons carefully to study ophthalmology as a science, and that they would thus create a demand for English literature upon the subject. At present the literature is entirely, or almost entirely, German and French; and the perusal of books in a foreign language must generally make a far greater demand upon the time and the attention of the reader, and be far more difficult to accomplish with celerity, than that of books in the mother tongue. We can imagine that, at no very distant period, the influence of ophthalmic departments at general hospitals might create a literature, and practically spread an amount of knowledge among the profession, that would do very much to supersede the necessity for the departments themselves, and leave the energy that had sustained them to seek its outlet in such fresh channels as the farther progress of surgical science might disclose.

EDUCATIONAL TESTS OF THE COLLEGE OF SURGEONS.

THE commercial value of the diploma of the College of Surgeons is no doubt still considerable, but its scientific worth continues to be depreciated in public and professional estimation. It will not bear comparison with that of other bodies. Of all examinations in the world that of the College of Surgeons of England, which should be one of the most honest and respectable, in the sense of its intrinsic significance, is one of the least so. It is a diploma which legally qualifies to practise, and which is required by several of the public bodies, and by the various hospital boards, but it affords an easy avenue to practice to men who need not be even half educated. It is truly a scandal that a diploma giving a legal title to practise should be granted after an examination which includes neither medicine, midwifery, materia medica, botany, nor chemistry. The examination is, in fact, a mere farce. The Council of the College of Surgeons are sadly put to the blush by the examinations of the College of Physicians, which they affect to disregard. At these examinations not only are the candidates examined in the whole range of professional subjects, but they are taken into the wards, and tested practically in their knowledge. At the last examination they were taken to four different hospitals, and each candidate passed through a clinical examination in medical cases on one day, and in surgical on the next. The licence of the College of Physicians for general practice is an admirable and honourable diploma; it is one of which the full value is being generally recognised by the profession, and the attitude of the College of Surgeons cannot be much longer maintained without a great loss of profit as well as of reputation. It is hardly to be believed that the chief surgical corporation of this country should continue to issue diplomas to practise on an examination which not only is limited to a fraction of the subjects necessary to every practitioner, whether surgical or medical, but does not apply any bedside tests of knowledge or practical trials of skill.

THE PRELIMINARY SCIENTIFIC EXAMINATION OF THE UNIVERSITY OF LONDON.

THE letter of Mr. Henry Power, published in our last number, is, we think, well worthy of the attention of the authorities of the University of London, emanating as it does from a distinguished teacher of physiology, who was himself a graduate of the University in the highest honours. Dr. Carpenter's circular to the medical schools has excited considerable comment, and has given rise in the columns of one of our contemporaries to feeble effusions asking for "pity for poor students," and suggesting the propriety of testing the Examiner in Chemistry's knowledge of Botany, the Botanical Examiner's knowledge of Zoology, and so on, as if such folly had anything to do with the question at issue.

The Senate of the University maintains that its standard is not too high for inceptive graduates in Medicine; and we think that, in the main, it is right, though we believe that it might with advantage to the student make a few alterations in the mode of conducting the examination. It is notorious that by far the greater portion of medical students begin their studies in October, and not in May; and, in fact, many teachers counsel this, on account of the more steady work of the winter as compared with the summer session. But how can a student be expected to be ready for an examination in the summer subjects of Botany and Zoology by the third Monday in July, when he is not taught a line of them until the preceding May, and is not able to attend a full course of lectures on either? Mr. Power's suggestion to divide the examination so as to free the student from the subjects of Mechanical and Natural Philosophy, and Chemistry, in April, and enable him to concentrate his attention on Botany, Zoology, and Practical Chemistry until September, would be of the greatest service to the students themselves, whilst it would enable many to present themselves who are now unable to do so.

Time is of great importance to the majority of students and their friends; for time is money. Notwithstanding the efforts of the General Medical Council, the College of Surgeons and the Apothecaries' Hall still require only three winters' and two summers' attendance at a medical school; but the University errs rather in the opposite direction, for, unless he have some previous knowledge of the subjects, a student cannot safely present himself for the Preliminary Scientific Examination until his second summer: the First M.B. Examination until his third summer: and the Second M.B. Examination until his fifth winter. This is supposing him to have no mishaps; for, should he be unfortunate at any one examination, he cannot present himself again for a whole year.

Mr. Power's suggestion to divide the Preliminary Scientific Examination, and to allow unsuccessful candidates at the first half of the examination to take up all their subjects on the following occasion, so as to avoid losing time, might, we think, be advantageously extended to the First M.B. Examination without the restriction which now obtains, that candidates so dividing their subjects necessarily lose a year, and are debarred from competing for honours. We would venture to suggest, too, that April is a much more suitable time for an examination in Anatomy and Physiology than August, following as it does upon the labours of the winter session, and, moreover, on account of the difference of temperature. The Senate is probably not aware of the real cruelty it inflicts by fixing heavy examinations in the hottest months of the year. Not many years back a candidate at the First M.B. Examination actually died almost in the examination-room, and we can look back ourselves with horror to the sweltering days in which we read up for and went through the ordeals of Matriculation in July and First M.B. in August.

We cannot help fancying that in the matter of the Preliminary Scientific Examination, Medicine has been a little sacrificed to Science. The Senate determined to institute a degree in Science, and being apparently loth to call a set of examiners together to little purpose, it amalgamated Medicine and Science, and the medical candidate has the same papers as those for the first B.Sc., but with Practical Chemistry in lieu of Mathematics. The number of the medical candidates, however, so greatly outweighs those for the degree in Science (there being 129 successful of the former in four years to 28 of the latter in the same period), that the convenience of any such arrangement ought not, and will not, we feel sure, weigh with the Senate for a moment. There is one other contrast we would make between the two examinations, and it is, that in "Science," as in "Arts," there are but three examinations (including Matriculation) before the baccalaureate is reached; whilst in "Medicine," thanks to the Preliminary Scientific Examination interpolated of late years, the number of examinations is raised to four before the coveted degree is attained.

THE LONDON HOSPITAL.

IT is satisfactory to find that the Committee of the London Hospital exonerate the house-surgeon from blame in respect to the complaint laid against that institution in *The Times* by Mr. Phillips; who appears, strangely enough, to have been ignorant of the existence of a Committee of Governors of the hospital—amongst whom we trust he has now enrolled his name. Whilst reprimanding the surgery-porter and the nurse, the Committee find that the house-surgeon was engaged in attending to an urgent case in the wards; but with the view of obviating such an occurrence for the future, they have appointed an additional house-surgeon.

All our general hospitals have been for the last few years experiencing the effects of that overcrowded condition of our streets to which public attention has been so repeatedly called of late. If the Registrar-General has to report weekly four or five fatal cases of street accident, it is not too much to say that the number of minor casualties from the same cause seeking relief at our hospitals may be counted by the hundred; and, with rare exceptions, they receive immediate and thorough attention from the resident officers. The amount of reconstruction of all kinds—railways, embankments, and commercial palaces—taking place all over the metropolis, adds its contribution of casualties to the already swollen return; so that at several hospitals the authorities have, wisely we think, appointed an assistant house-surgeon, who shall always be ready to take charge of casualties, and whose attention cannot be called off by any occurrences in the wards. This example is to be commended to the notice of the governors of those institutions which have not yet adopted the plan; and it will, we feel sure, be warmly supported by the medical officers, since it will furnish another of those valuable clinical appointments which far outweigh prizes and scholarships in sterling worth, though they may give less glory and more hard work for the time being.

As the servants of the hospital appear to have been to blame in the instance we have referred to, it may not be out of place to urge upon house-surgeons the propriety of checking the tendency to harshness with the poor which seems to be the almost necessary consequence of conferring a "little brief authority" on members of the lower classes. A house-surgeon or dresser who allows a porter to "bully" a patient or his friends without interfering, becomes in some sort *particeps criminis*, and may have the burden laid at his own door without any very great injustice.

We may quote, as *apropos* to the subject of supposed neglect of casualties, the following extract from a well-known manual:—

"The house-surgeon should make an invariable rule of seeing all cases of accident as soon as he is called to them. In by far the majority of cases a few minutes' delay would be of no consequence; but as it is impossible to say when the highly urgent cases may occur, the house-surgeon—having due regard to public opinion and the verdict of a coroner's jury—should always give his immediate attendance."

STATE MEDICINE: AMENDMENT OF THE SANITARY LAWS.

MEETING OF THE METROPOLITAN COUNTIES BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

AT a meeting of this Branch held on Friday, the 26th ult., Dr. Sieveking in the chair, Dr. Druitt, president of the Association of Medical Officers of Health, opened a discussion on Amendment in the Sanitary Laws. He said that more vigorous legislative powers were required for dealing with the everyday zymotic diseases, scarlet fever, typhus, diphtheria, small-pox, &c. He approved of the principle on which the existing machinery for carrying out the law was based—that of local self-government,—but thought that the powers of vestries ought to be enlarged. If the powers of a vestryman were as great as those of a justice of the peace, the position would be as honourable and as much sought after. The vestries delegated their powers to the sanitary committees, which could not act on complaints without referring back to the vestry. If owners of property were recalcitrant, the interference of the police magistrate must be sought. And the legal mind seemed to have no faith in sanitary measures, and sympathised usually with the defendant rather than the prosecutors in such cases. The law gave no power for removing or isolating infected persons in crowded tenements; and three weeks or a month was consumed by legal processes before any order to cleanse or disinfect premises could be carried out. It was very difficult to ascertain who was the owner of the house. The gist of the remedies which he proposed was, the consolidation of the Sanitary Acts. The local authorities should be invested with powers of removal and isolation in the cases referred to, and of compelling the interment of the dead; and they should have greater summary powers.

Mr. Jabez Hogg, and Mr. Smith of Eltham, generally agreed with Dr. Druitt. Mr. Smith, however, stated that rural vestries could not safely be trusted with the proposed powers. What was really needed was a central authority—a State department to take cognizance of all matters relating to the public health. Dr. Webster of Dulwich, Dr. Chowne, and Mr. Lord of Hampstead, spoke in the same sense.

Dr. Sibson moved "That it be referred to the Council of the Branch to consider whether any and what steps may be taken for the purpose of securing a recognition of a Board of State Medicine as an integral part of the Legislature, and also what means may be adopted for obtaining a consolidation of the sanitary laws."

At the suggestion of Dr. A. P. Stewart, who seconded the resolution, it was amended, by remitting to the Council the task of considering also the measures to be taken for amending the sanitary laws.

Dr. Headlam Greenhow saw great difficulties in the way of the proposals mooted. It was idle to talk of giving to the vestries the powers proposed by Dr. Druitt. Such a proposal would never be sanctioned by the Legislature. However it might be in London, rural vestrymen were mostly ill-educated persons, who could not be trusted with such extensive powers. The consolidation of sanitary law was desirable, but could not be carried out to the extent apparently implied. The association must beware that it did not do mischief in asking again for a separate ministry of health, which had once existed, but had been swept away. The Vice-President of the Council was now charged with the subject of public health, and was responsible to Parliament: it was necessary to educate the public as to sanitary conditions before endeavouring to secure a more powerful position in the State for State Medicine.

After a few words from Dr. Druitt, the resolution was put and carried *nem. con.*

THE ADMIRALTY COMMITTEE ON THE ARMY AND NAVY MEDICAL SERVICES.

A WELL-INFORMED correspondent writes to us that "the medical department of the army is to get *nothing;* that of the navy will get an increase of pay and a few other advantages. The army medical officers deserve their fate; those who were called to give evidence would not speak out before the Commissioners what they had been complaining loudly about in the press. Moreover, a good deal of care was taken to summon only men who were safe. Those who were known to be independent were not asked questions on such points at all. But the thing will correct itself in time. India is getting and will get the best men. The British service will in a few years have to content itself with the refuse of the schools, and this will not be endured for ever."

MEDICAL CHARITIES.—Mr. Joseph Cookson, of Clifton, Bristol, lately deceased, has bequeathed one hundred guineas each, free of legacy duty, to the Bristol Infirmary and the Clifton Dispensary.

Correspondence.

"Audi alteram partem."

THE TREATMENT OF PNEUMONIA.

To the Editor of THE LANCET.

SIR,—I have carefully perused the letter of Dr. Barclay in your number for Jan. 13th, but fail to see in it any sound argument capable of supporting his views as to medical statistics, or as to the statement that the British Medical Association, in its effort to determine the value of doubtful questions in medical practice, "took up the inquiry in a manner which could lead to no useful result." The manner of inquiry proposed by the Association was—1st, carefully to observe cases in which a particular treatment was tried; and 2ndly, to tabulate the results on a uniform plan. This, Dr. Barclay thinks, gave such evidence of faulty reasoning, that he did not scruple to use it as illustrative of the errors to which, as students and investigators, we of this day are most exposed. Accordingly in the Lumleian Lectures, afterwards published as "Medical Errors," the proposition of the Association was referred to as a notable example of those errors.

The argument of Dr. Barclay, whether applied to the proceedings of the British Medical Association, to statistics in general, or to my statistics of pneumonia in particular, is as follows:—To derive, he says, trustworthy results from comparing cases, they must be alike. But every case is made up of circumstances which are variable in different persons, and if fifteen of these circumstances exist, a mathematical equation proves that it will require 32,000 cases to secure two that are alike. Therefore, as it is impossible to obtain such large numbers, it is clear to his mind "that statistics never will, and never can, establish the value of any mode of treatment."* Now the error in this syllogism is in assuming as the major premise that every case of pneumonia, or any other disease, should be so absolutely and mathematically alike as to warrant an equation such as he has employed. The reply to it by Louis—viz., "that to compare one tree with another, it is not necessary that every individual leaf be identical in size and form," Dr. Barclay cannot understand. He calls my quotation of it, "an impossible method of reasoning," and wishes to know how it applies. To me the application is obvious. Trees, like diseases, are never exactly alike, and the circumstances which influence them are constantly varying. In the same manner that it is not necessary that the leaves in two trees should be identical in order to admit of their comparison, so it is not necessary that the circumstances imagined by Dr. Barclay to influence the treatment of disease should be alike either.

I think that, in his efforts to teach us how to reason, Dr. Barclay himself has fallen into the common error of a *petitio principii*. In order to be logical, it was incumbent on Dr. Barclay to show that all the circumstances which he supposes capable of influencing the treatment of pneumonia really do possess that power. Yet how can he prove anything without having recourse to those very statistical inquiries which he condemns? It is true he cites several of those circumstances which he imagines influence the treatment of pneumonia. Among these is the extent of the disease; that is, to use his own words, "whether a third, a half, or the whole of one lung be attacked, or the half or the whole of both lungs." Now my tabulated cases show that the extent of the disease neither influenced the mortality nor the duration of a pneumonia, when treated with restoratives; a fact which must be very startling to all those who will found medicine upon hypothesis, and calculate equations from imaginative data. Now it is the great merit of statistics to test the truth of the supposed objections and plausibilities which encumber medicine; and those I have given as to pneumonia, while they prove that age and sex do influence the progress of the disease, as clearly prove that the extent of the disease does not.†

Dr. Barclay admits that he overlooked a very important statement in my pamphlet, to the effect that nutrients were given in all the cases; but, strange to say, he still argues that because the word "nutrients" is not inserted in every line of the column—that is, 129 times,—the statistics are rendered worthless. I cannot see the force of this reasoning. He also seems to be of opinion that, as nutrients are given in the London hospitals more freely to those who die than to those who recover, therefore these nutrients have little to do with the recoveries. When Dr. Barclay publishes the statistics of these cases we may discover the reason of this. In the meantime his argument is equivalent to this—viz., that men reduced by starvation having died, although food was at length liberally administered to them, therefore food is no remedy for starvation.

Dr. Barclay cites the different conclusions drawn by Dr. Markham and by myself from Dr. Bell's cases in proof of the uncertainty of statistics. But there are no different conclusions between us on the point, because Dr. Markham showed that my conclusion was based on an error in figures. The moment this appeared all difference between us ceased—the error was admitted and the conclusion withdrawn. Nothing can prove more satisfactorily the advantage of prosecuting and studying statistics. Had the difference been one merely of opinion, we might have discussed it for ever; but being one of figures, there is no longer room for any discussion as to the point on which we differed.

Again: Dr. Barclay obviously mistakes the object of my efforts in seeking to establish a restorative instead of an antiphlogistic, expectant, mixed, mercurial or other kind of treatment in pneumonia. He says I ought to include in my statistics those cases which were partially treated by my colleagues, even though opposed to the restorative plan; also those admitted moribund; and all those latent and chronic cases which supervened on fatal diseases immediately before death. Now, whilst it is clear that in a statistical medical inquiry the mathematical exactitude contended for by Dr. Barclay is useless, it must be equally evident that to judge of the effects of any treatment it is necessary that such treatment be fairly tried in cases *essentially* alike. I cannot therefore follow the example of Dr. Barclay, and mingle together cases essentially unlike, because it would necessarily result that the conclusion, as in his instance, must be erroneous. But, says Dr. Barclay, "as soon as selections are made the question ceases to be one of statistics." But selections of similar diseases and similar modes of treatment must be made to arrive at truth. Dr. Barclay may jumble contraries together and call them statistics if he pleases, but these are faulty and untrustworthy statistics. Indeed, nothing strikes me with so much surprise as to see a physician, in his efforts to instruct us in medical reasoning, maintain two such contradictory propositions as he does—viz., first, that mathematical similitude is required in order to compare even two cases, and that to arrive at this we dare not venture to do so correctly unless we have treated at least 32,000 examples of any particular disease; and, secondly, that that only can constitute a true statistic in which the most opposite cases, both as to their nature and treatment, are, without selection, added together.

I quite agree with Dr. Barclay in deprecating everything personal or offensive in medical discussion, which I believe, if conducted courteously and in good faith, is the best means of arriving at truth. But I beg to suggest, whether he has not somewhat overstepped his own rule in this matter when, with a view of throwing further ridicule on medical statistics, he says, "Bouillaud's plan is just as good as any other—to exclude all the fatal cases, and calculate the recoveries at 100 per cent." Does Dr. Barclay seriously mean that the distinguished Clinical Professor of La Charité has ever proposed such a plan? If he has, I am ignorant of it, and should like to know when and where he did so. If he has not, I am sure Dr. Barclay will see the propriety, not only of retracting such a remark, but of exonerating so eminent a man from the reproach it conveys.

In conclusion, I yet entertain the hope that my medical brethren, and more especially the members of the British Medical Association, will largely enter into the plan of carefully observing cases of disease, and tabulating the results of their treatment according to a uniform plan. Thereby I feel satisfied they will vindicate the usefulness of the Association by assisting the great effort of rendering medical practice more certain and exact. I am happy to say that my last communication to your journal induced several practitioners to apply for schedules as to the treatment of pneumonia, and I beg to repeat that it will give me great pleasure to forward others to all who desire to co-operate.

I am, Sir, your obedient servant,

Edinburgh, Jan. 20th, 1866. J. HUGHES BENNETT.

* British Medical Journal, No. 254, p. 510.

† See Restorative Treatment of Pneumonia. Edinburgh: Black.

NOTES ON THE CLIMATE OF MADEIRA.

To the Editor of THE LANCET.

SIR,—The perusal of different writings on Madeira and its climate, in connexion with its appliance to chest diseases, fails to point out its most important feature—that is, the cases for which this particular climate is most fitted; for, as I have before remarked, climate being a therapeutic agent, it cannot suit all cases indiscriminately. It is, therefore, owing to the want of selection of proper cases to be submitted to this agent that so much disappointment and want of success have been manifested among the invalids who have been sent out to Madeira, and among those to whose care they have been entrusted. The observation of a large number of cases for several winters alone could enable one to form an opinion on this important subject.

Having had many opportunities of seeing and performing surgical operations, I have been struck with the marvellous rapidity with which wounds of all kinds, and in different tissues of the body, healed by first intention. I will only mention, as an illustration, the first case of surgery I undertook here. The subject was a girl, aged seventeen, who bore a tumour of the right mamma of so enormous a development (fifteen pounds and a half) that she was obliged to carry it in a sling. I removed the tumour with the whole of the gland on the 18th of January, 1862, and on the 26th of the same month the wound (eleven inches and a quarter long) was perfectly healed. She was photographed on the 28th. Many other instances of remarkably rapid cicatrization, both of internal and external wounds, have attracted my attention.

In connexion with the above fact, another remarkable circumstance came under observation, which was the rapidity with which phthisical patients in the second and third degree arriving in Madeira with moist sounds of every size soon lost them; cavities both large and small soon became silent, secretion ceased, and cicatrization ensued. The irritation which often exists in the larynx and remainder of the air-passages is also singularly soothed and quieted; the small ulcerations which also frequently appear on the laryngeal mucous membrane rapidly disappear, and the tissues resume their normal characters. Such results have been often observed in both sexes, in all ages and conditions. Bronchitis, whether acute or chronic, independent or in connexion with phthisis, is also highly benefited by the effect of this climate. I feel convinced that the power of cicatrization of Madeira air, with an equable temperature, is the principal cause of the improvement experienced by such cases as I have pointed out; and that if the general health is carefully attended to, and the chest properly observed, better results will be obtained, and less complaints, sometimes just, be made.

On the other hand, Madeira, from its geographical position, being encompassed by sea, its bay being completely encircled on the north-west, north, and north-east sides by very elevated mountains ranging between two and four thousand feet high, is naturally exposed to the east, south, and westerly winds. The east is an extremely dry wind (a sort of sirocco); it seldom prevails in winter. The south-east and west winds always bring rain or dampness. It must be observed, however, that the north-east wind blows nine months in the year, and though not felt directly, is received in Funchal in a recurrent stream, after striking the hills on the western side of the bay. These conditions necessarily imply warmth, and a certain amount of humidity, so soothing to those deeply affected with consumption, but depressing to those who, in the very beginning of the affection, have not their general health and constitution impaired by deep-seated and advanced disease, and would require a more bracing and invigorating atmosphere. These soon feeling the effects of an equable warm temperature, taking no exercise in the upper and cooler regions, lose their appetite, and in the course of time fail in general health, whilst the local disease is aggravated. This would be avoided if such cases were to inhabit the higher regions of Funchal; but they would certainly feel the effects of isolation and inactivity, besides which, if they are fit for more elevated regions, it shows that they ought to be sent to some more northern climate than Madeira. This is so much the more evident, that as the more advanced cases improve under the influence of the Funchal seaside climate, their general health feels occasionally the want of a cooler atmosphere; it is then we have recourse to the mountain air at an elevation of six or seven hundred feet above the level of the sea, where the equilibrium is soon re-established between the local disease and general health, otherwise the disease will necessarily progress.

The study of climate, like that of most of our therapeutic agents, is still in the background of science. Its general application to cases without selection has been too frequently the cause of discredit to the profession, and most certainly of disappointment to the patient. All those who have made phthisis their particular study know how much care and attention are required in its treatment; for no patients present such a variety of symptoms, both physical and moral, so complicated in their manifestations, as consumptive cases. Too much pains, therefore, cannot be taken in scrutinizing one by one the different symptoms, and indicating with the greatest care the proper treatment for each particular case. I would wish it to be borne in mind that from a climate like this the best results will be obtained in cases where disease is so far advanced as to have produced disintegration of tissue, where the constitution is so far impaired as not to be able to resist a cold atmosphere, and where living constantly in the open air is the greatest desideratum.

The time of year at which invalids should resort to Madeira is a subject often discussed, and of great importance; generally speaking, they leave England too late in the year, many arriving here at the latter end of November. It has been urged by them, and by some of their medical advisers, that the heat of September and October in Funchal is too great, and might be prejudicial. This remark, if intended to point out the evil effects of a sudden change of temperature, fails to do so, for the temperature at Funchal in October and November varies but little, whereas in England the difference is considerable; so that the change would perhaps be greater on arriving in November than in October; besides which, the gales which prevail in November make the sea voyage in that month more unpleasant than beneficial. Hardly a year passes without seeing one of the November packets put back into some port of safety for several days, thereby obliging the invalid to undergo all the discomforts of a prolonged stay on board. However, to conciliate all opinions on this topic, I would suggest a plan which will no doubt be beneficial to all, and by which the heat of Funchal, if too great, will be avoided, and that is, to send invalids on their arrival to an elevation of six or seven hundred feet above the level of the sea, where they will enjoy the mountain air for the length of time necessary to prepare them for the Funchal climate. I need not add that the proper time for leaving Madeira, either directly or viâ Lisbon, should on no account be earlier than the 20th of May.

The present communication by steam to Madeira is effected in the following way by four different lines of steamers:—1st. The African Mail packet, leaving Liverpool on the 24th of every month. 2nd. The Cape Mail, Diamond line, leaving London on the 28th and Falmouth on the 1st of every month. 3rd. The Lusitania Company's steamer, leaving London on the 5th and Lisbon on the 15th (the departure from Lisbon on 15th would be available by those passengers who would leave Southampton by the Royal Mail Brazilian packet, 9th). 4th. The Portuguese African Mail, leaving Lisbon on the 5th of every month. In October and November, the Royal Mail Company generally allow one of their boats to touch at Madeira.

I am, Sir, your obedient servant,

Madeira, Jan. 1866. G. H. BRANDT, M.D.

THE PHYSIOLOGICAL THEORY OF CHOLERA.

To the Editor of THE LANCET.

SIR,—In "THE LANCET Record" of last week, the Physiological Theory of Cholera is alluded to in these words, viz.:—

"If we are to believe M. Marey, who has just concluded a rather elaborate memoir upon the Cause of Cholera, the symptoms of this disease are entirely produced by the influence of the sympathetic nerve. He adduces evidence of the disorganization of the ganglia of the sympathetic in cases of cholera, and argues, upon somewhat the same grounds as Dr. Chapman, that the influence of the sympathetic over the minute blood-vessels is the proximate cause of the choleraic discharges."

Although so much has been written concerning the nature and treatment of cholera, I trust you will not deem the following remarks unworthy the attention of your numerous readers, inasmuch as the origin and progress of any special fact or opinion in pathology are, to say the least, interesting, if not instructive. Now, at pages 865, 866, and 867 of vol. XXX. (1835 and 1836) of THE LANCET, I find a paper

entitled "Pathology of Fever and Malignant Cholera;" and, what is more, this paper is evidently written with but one object, and that is to prove that "the symptoms of this disease are entirely produced by the influence of the sympathetic nerve," to quote "THE LANCET Record." The author claims for both "fever and cholera" but one source. Fever and cholera are declared to be varieties of one pathological condition; and this, it is affirmed, is located in "the ganglia of the sympathetic." The following passages are to the point, viz.:—

"It would appear, then, that the efficient agents of fever—cholera—act primarily on the organic nervous system, and this is made evident by the parts or organs with which it is connected being those first affected, as shown in the disordered states of the respiration, circulation, digestion, and *secretion*. .....The cause of death in cholera and in other fatal fevers is owing, first, to the operation of a poison on the ganglionic system of nerves, checking the whole of the vital functions; and, secondly, to the effects of such cause—consisting in the discontinuance of the normal chemical changes in the lungs, thus producing blood which is unfit for the support of life.....No observer can help noticing the analogy between the deep collapse in cholera and the cold stage of intermittent fevers. In both we have the suspended state of the vital functions, the coldness and lividity of surface, and the anxious and retracted countenance. The reaction in each is of the same character, with occasional congestion of internal viscera."

Again, in vol. xl. of THE LANCET (1842 and '43), pages 121, 123, I see the same views of cholera advocated, but on this occasion in some detail. The writer seeks now to illustrate his position by references to "the effects of a heavy blow on the epigastrium," to the effects of "fear," of "narcotic poisons," of "bites of venomous serpents," and of "tying or dividing the par vagum."

I may add, the first paper quoted omits all reference to treatment, but the second, written nearly a quarter of a century ago (see vol. xl. of THE LANCET), advises, among other things, the steady and persistent use of purgative medicines, "to restore the suspended functions of all the abdominal organs." Furthermore, "the pathology and treatment of cholera" is the subject of an article in vol. i. of THE LANCET (N. S.), 1854, nearly twelve years since, in which the foregoing opinions are again urged on the attention of your readers. In this, the third paper on the subject, a deep stress is laid on the use of "purgatives" in cholera. These, it is declared, do not act as such, but they, nevertheless, "restrain the diarrhœa and effectually check the intestinal discharges. They act as restoratives of the normal character of the secretions common to the primæ viæ, and so establish a healthy fæcal discharge." Pills of calomel and compound extract of colocynth, with an essential oil, are recommended to be taken frequently, and alternately with portions of a mixture composed of castor oil and spirits of turpentine; such means, it is declared, have proved eminently successful.

To those engaged on inquiries into the pathology of cholera so-called, but desirous of balancing the many conflicting testimonies in regard to the best treatment of this fearful malady, the foregoing remarks may not prove unacceptable. Moreover, these may be said to confirm the views of M. Marey and Dr. Chapman, as given in "THE LANCET Record of the Progress of Medicine."

I am, Sir, your obedient servant,

JAMES GEORGE DAVEY, M.D. St. And.,
Member of Roy. Coll. of Phys. of Lond., &c.

Northwoods, near Bristol, Jan. 1866.

P.S.—I would ask those favourable to the exclusively contagious nature of cholera, in what way they would explain its outbreak among a ship's crew for weeks at sea, and some hundreds of miles from land? Does it not occur to you, Mr. Editor, that the theory of spontaneous development derives confirmation from the fact of a single case of cholera occurring in a country district in Gloucestershire at a time when the disease is not known in the same or in a contiguous county?—J. G. D.

PUERILE RESPIRATION IN PNEUMONIA.

To the Editor of THE LANCET.

SIR,—At a late meeting of the Medico-Chirurgical Society of London, Dr. Waters of Liverpool brought under notice two cases of pneumonia, in which a puerile respiration in the affected part preceded the more ordinary symptoms of the disease. On this point I beg to state that it has been long known in Dublin as occasionally occurring, and will be found specially noticed in the able work of Dr. Stokes, published some twenty-five years ago.

I am, Sir, yours, &c.,

Dublin, Jan. 1866. HENRY KENNEDY, M.D.

VACCINATION AND THE RINDERPEST.

PROFESSOR M'CALL of Glasgow has communicated to us the fact that he has vaccinated successfully an animal which had passed through an attack of the rinderpest. This is an additional fact, indicating the absence either of identity or antagonism between cow-pox and rinderpest. We early suggested this experiment: it is the first instance, so far as we know, in which it has been performed. Professor M'Call states that he has been unable to discover anything like an exanthematous eruption in any of the animals dying with rinderpest in Glasgow or its vicinity, and that his assistants and friends who have seen the animals with him are equally unable to discern any eruption. In London, Cheshire, and Norfolk, all observers are agreed as to the presence of the eruption, although doubtful as to its truly vesicular character.

EPSOM COLLEGE.

SIR WM. FERGUSSON has consented to preside at the annual festival of the Royal Medical College, to be held at Willis's Rooms, on the 26th of April next. That he will be warmly supported by his professional brethren we are confident.

The list of stewards is about to be published, and we urge upon all who have the interest of this valuable institution at heart, to at once forward their names to Mr. Propert, to be enrolled in the list.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen having undergone the necessary examinations for the diploma, were admitted members of the College at a meeting of the Court of Examiners on the 25th ult.:—

Budd, Herbert Goldingham, Worcester.
Buhôt, William Idill, M.D., Tobago, West Indies.
Bushell, Stephen Wootton, Brixton.
Diver, Thomas, M.D., London.
Gordon, Henry Pelham, Queensland.
Hussey, John Fraser, Salisbury.
La Mert, Israel John, Albemarle-street.

It is stated that of the fifty-six candidates who presented themselves for examination on the 23rd, 24th, and 25th ult., only eight were referred back to their studies for six months.

[*Erratum.*—In the list of members admitted Jan. 24th, published last week, for "Thomas Henry Simpson, Fore-street," read "John Henry Simpson, Fore-street."]

NAVAL SURGEONS.—At a meeting of the Court of Examiners of the Royal College of Surgeons of England on the 25th ult. the following Assistant-Surgeons in the Royal Navy passed their examinations for full Surgeons in that department of the public service:—

Colquhoun, Archibald Grant, of the Royal Marine Infirmary, Woolwich; diploma of membership of the College dated July 30, 1861.
McMorris, Robert James (half pay); member May 16, 1859.
Yarde, William, M.D., of H.M.S. *Industry*, Woolwich Dockyard; member July 3, 1857.
Curtis, George, of Haslar Hospital; Licentiate of the Royal College of Surgeons, Ireland, May 20, 1861.

APOTHECARIES' HALL.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the 25th ult.:—

Pearson, Henry, Plymouth-grove, Manchester.

The following gentlemen also on the same day passed their first examination:—

Hall, Richard Strange, Manchester Hospital.
Thurston, William French, Guy's Hospital.

Of the thirty-two candidates who presented themselves for the Preliminary Examination in Arts on the 26th and 27th

ult. the following passed, and received certificates of proficiency in general education:—

William Atter, Edward E. A. Batchelor, J. H. Clark, G. K. Elphinstone, Wm. E. Fulford, Henry B. Harrison, Chas. Hamor Hill, Thos. Wood Hill, Wm. Hodgson, W. H. Johnson, John C. Keighley, Henry Medd, J. W. Moss, Alfred Blake Norman, Wladham Randall, B. Stewart Ringer, Wm. Sheard, H. H. Spratt, Thos. Unicume, Sam. Walker, Francis Warner, F. W. Wilmore.

CAMBRIDGE UNIVERSITY.—The following have obtained the Professor's Certificate in Comparative Anatomy:—

Blyth, L. G., Corpus College.
Fitzgerald, C. T., St. John's College.
Tucker, J. K., Magdalen College.

THE DENTAL HOSPITAL.—At the annual general meeting of the governors the funds were reported to be in a satisfactory state, and the hospital prospering in every respect.

PLYMOUTH LUNATIC ASYLUM.—At a meeting of the Plymouth Town Council, held last week, it was proposed that an asylum in the borough, large enough to contain 200 pauper lunatics, should be built.

SMALL-POX is on the increase in Paris. The Minister for War has ordered the students in the Ecole St. Cyr, the Polytechnic School, and the school of La Flèche to be vaccinated.

A CHOLERA MEDAL.—The Emperor Maximilian has requested the Empress Engénie to accept a medal on account of her courage in visiting the cholera wards of the Paris hospitals.

THE CATTLE PLAGUE.—At the Edinburgh Town Council meeting on Tuesday, Mr. Ford made the gratifying statement, on the authority of Professor Dick, that Edinburgh is now entirely free from cattle plague.

METEORITES.—The Academy of Sciences has received from M. Dautrie an account of the fall of certain meteorites in the territory of the tribe of Sewtrodja, Algeria, on the 25th of August last.

EXTENSION OF THE CATTLE PLAGUE.—The cattle plague is still extending throughout the length and breadth of England. Upwards of 9000 per week fall victims to this malady.

THE ROYAL KENT DISPENSARY, GREENWICH.—It is in contemplation to open the board-room of this institution as an accident ward, with six beds. The tradesmen of the neighbourhood have very generously offered to fit it up gratuitously.

IN the week that ended on Saturday, Jan. 20th, the births registered in London, and twelve other large towns of the United Kingdom, were 4568. In London alone 2246 children were registered in the week.

RAILWAY ACCIDENTS IN AMERICA.—The number of railroad accidents in the United States during the past year was 183, against 140 the year previous. The fatality, however, was in favour of 1865, the number of lives lost during the year being 335, against 404 in 1864.

DWELLINGS FOR THE POOR.—At the recent meeting of the various boards of guardians at the Strand Union to consider this question, Mr. Storr read extracts from Dr. Conway Evans' pamphlet on "Overcrowding and Typhus," showing the connexion between want of ventilation and disease.

CATTLE DISEASE IN FRANCE.—The report on the cattle disease in France proves that in consequence of the prompt and energetic measures adopted by the French Government, but forty-three beasts in the whole French empire were victims to its ravages during the month of December.

DEATH BY ELECTRICITY.—The rats in the Parisian sewers are being killed by electricity. Wires insulated by glass feet, and connected with a strong galvanic battery, are hung with little pieces of roast meat at short intervals. The rats, by nibbling at the bait, bring down the galvanic shock with terrific power upon their bodies, and death is instantaneous. What are the post-mortem appearances?

VENESECTION IN ITALY.—In giving an account of the death of the late Sir Charles Eastlake, President of the Royal Academy, the *Reader* says that, like the late Count Cavour, Sir Charles would seem to have fallen a victim to professional ignorance and prejudice in the adoption of a merciless course of bloodletting, which so completely prostrated him as to destroy the power of taking nourishment.

DR. FORBES WINSLOW.—We are happy to state that Dr. Winslow is now convalescent from his long and serious illness. His complaint originated in a fall from his horse, by which he sustained an injury to the seventh dorsal vertebra. After the lapse of a few months his general health began to fail, and pus and blood passed in large quantities with the urine. Dr. Rees suspected that an abscess, formed from the injury, had found an opening into the urinary passages. Dr. Winslow has, from July last, been under the care of Mr. Irving, of Stanmore, and his health has lately gradually and steadily improved. He is now capable of undertaking his professional duties.

COMMITTEE ON CONTAGIOUS DISEASES.—The Committee on this important subject has just sent in a report of its lengthened sitting of upwards of a year to the Lords of the Admiralty, and it is understood that some very stringent measures are proposed with a view to diminish the great and predominant evil which has proved so great an injury to the men of the two services.

THE CONDITION OF THE INMATES OF WORKHOUSE INFIRMARIES.—An attempt is now being made to form an association for the improvement of the condition of the sick poor in the metropolitan workhouses. The terrible revelations of THE LANCET commissioners, and of recent inquests, unhappily place it beyond doubt that the inmates of workhouse infirmaries are exposed to cruel and often fatal neglect; and it is perhaps the natural impulse of benevolence to seek the speediest remedy for the evil. We cannot help thinking, however, that private charity has already gone too far in relieving the authorities from the obligations which properly rest upon them, and in countenancing the idea that the guardians and the rate-payers are not altogether responsible for the maintenance of the poor. Such appeals as those which have come during the last month or two from Lambeth, Bethnal Green, and other parishes, on behalf of the sick and destitute, are only an encouragement to ignorant and sordid administrators to persevere in their efforts to frustrate and evade their obligations. A sweeping reform is required in the infirmaries, as well as in other departments of the workhouse system, but the burden ought not to be shifted from the shoulders of those who are by law directed to bear it.—*Pall-mall Gazette.*

THE HUNTERIAN MUSEUM.—A very interesting and valuable addition has just been made to the above unrivalled collection by the purchase, by the Council of the College of Surgeons of England, of a perfect skeleton of the Greenland whale, the *Balæna mysticeta* of Linnæus, better known in commerce as the Northern Right-whale. The specimen in question is that of an adult female taken at Holsteinsborg, in South Greenland, and transmitted thence to Copenhagen. It arrived in this country in excellent condition, possessing the whole of the vertebræ, even to the end of the tail, the hyoid and the rudimentary pelvic bones, wanting nothing in fact but three of the terminal phalanges. Perhaps no animal that could be named was so desirable as an addition to the museum. Although for a long period of years this particular species of whales has been destroyed in immense numbers by expeditions fitted out from various ports, until the species is threatened with speedy extermination, and although its osteological characters offer most remarkable peculiarities, no skeleton had ever been brought to England. The bones, as is always the case in these large cetaceans, contained much oil, but have so much improved in condition by the treatment they have received at the hands of Mr. Flower, the skilful articulator, that very little oil remains, and the huge animal is now securely supported on six iron columns in the lofty and spacious museum so peculiarly well fitted for the display of such large specimens. The anatomy of the cetacea was a favourite study of John Hunter, the founder of the museum, as evidenced by his elaborate paper "On the Structure and Economy of Whales," published in the Philosophical Transactions, 1787, and by the valuable collections he made of their remains. The zeal with which Mr. Flower, the indefatigable conservator of the museum, prosecuted his search for this monster of the deep, and the success which attended his efforts, have been highly gratifying to the Council of the College, who spare no expense in extending this collection, on which upwards of £250,000 has been expended from the funds of the College.

A SURGEON COMMITTED FOR MANSLAUGHTER.—An inquest was held at Middlesboro' on Jan. 22nd, on the body of William Jenkinson, an engine driver, who died on Sunday

night in consequence, as was alleged, of improper medical treatment by Mr. Simpson, assistant to Mr. Richardson, parish surgeon. Mr. Hubbard, surgeon, who subsequently attended the man, deposed that had he in the first instance had proper surgical attendance, he might have lived. The jury returned a verdict as to the cause of death, adding that it was "through the want of competent skill and proper caution on the part of Mr. Simpson; and it is to be regretted that Dr. Richardson did not take an earlier opportunity of seeing the deceased." The coroner said the verdict amounted to manslaughter, and committed Mr. Simpson for trial, accepting bail.

Obituary.

WM. ANDREW PATRICK STUART, ESQ., M.R.C.S.E.,

OF BARBADOES.

THIS gentleman, who died on the 10th ult. of typhoid fever, had completed his medical studies at University College, where he gained several prizes and certificates of honour in the various classes. Subsequently at the hospital he obtained the first prize for Reports on Clinical Cases, and competed with invariable success for numerous offices, the duties of which he performed to the highest satisfaction of his teachers, and, moreover, so as to show himself to be a man of unusual intelligence and practical skill. A month later Mr. Stuart would have finished a most successful period of study, whereby he had gained the esteem and regard of his seniors, and a reputation amongst his friends which was an earnest of pre-eminence in his future career. From his strictly upright conduct, his excellent social qualities, his untiring energy and quick perceptive powers, he promised to become a distinguished member of the profession; and we cannot but lament that, at the early age of twenty-one, so excellent a young man has been cut down with fever.

His funeral took place on the 16th ult., at the Kensal-green Cemetery. Besides the mourners, several of the professors were present, amongst whom were Dr. Jenner, Dr. Hare, Dr. Reynolds, Mr. John Marshall, and others of the medical staff. Nearly twenty of his fellow-students also attended the ceremony, anxious to show their respect for his memory and regret for one who fell sick and died while performing his duties in the hospital wards. His loss will be long felt by his friends at University College; it will be an irreparable and hardly a consolable one to his relatives abroad.

FELIX H. KEMPSTER, M.B. LOND., M.R.C.S.E.,

MELBOURNE, AUSTRALIA.

Mr. Kempster was formerly a most distinguished student of University College Hospital, carrying off nearly every scholarship and prize during his studentship. He was also house-surgeon to that institution. At the First M.B. examination of the University of London he gained two of the three scholarships open to competition, and a gold medal in the third subject.

His health failing from incessant study, he went to Melbourne, where he became one of the resident surgeons to the hospital, and on the retirement of Mr. James was elected to the position of senior resident medical officer.

In answer to an invitation from the principal inhabitants of Castlemaine, he entered into private practice there for some months, but broke down, and had to be conveyed to Melbourne, where Professor Halford generously extended his hospitality to him until his death, which took place on the 19th of September last, from phthisis. He was treated with the greatest care and kindness by all his medical brethren.

MEDICAL APPOINTMENTS.

J. BEATTY, M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the East Oldbury District (the Oldbury District having been divided into two) of the West Bromwich Union, Staffordshire, vice T. B. Cooper, L.R.C.P.Ed., deceased.

J. BEAVAN, M.R.C.S.E., late House-Surgeon to the Hereford Infirmary, has been elected Medical Officer and Public Vaccinator for District No. 1 and the Workhouse of the Leominster Union, Herefordshire, vice J. Davies, L.R.C.P.Ed., resigned.

W. M. BOBART, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for District No. 1 of the Derby Union, vice J. Lindley, M.R.C.S.E., resigned.

R. M. BOWSTEAD, M.D., has been appointed Medical Officer for the Saunderton Workhouse of the Wycombe Union, vice W. C. Small, M.R.C.S.E., resigned.

S. CHATER, M.R.C.S.E., Assistant-Surgeon to the London Rifle Brigade, has been promoted to Surgeon.

J. T. DICKSON, M.R.C.S.E., has been appointed Assistant Medical Officer to the City of London Lunatic Asylum at Stone, near Dartford.

J. J. FLINN, L.R.C.P., M.R.C.S., L.M., has been appointed Surgeon to the West Derby Union Workhouse, vice J. R. Nevins, M.D., resigned.

C. HAMMOND, L.R.C.P.L., has been elected Medical Officer and Public Vaccinator for No. 3 or Bentley District of the Alton Union, vice H. V. Sandford, M.D., resigned.

J. J. HARDESTY, L.R.C.P.Ed., has been elected Medical Officer and Public Vaccinator for the St. Weonards or No. 4 District of the Ross Union, Herefordshire, vice C. C. Cocks, M.D., resigned, and appointed to District No. 4 (Sollershope).

J. B. KEARNEY, L.K.Q.C.P.I., has been elected Medical Officer, Public Vaccinator, and Registrar of Births, Marriages, and Deaths for the Clonmany Dispensary District of the Inishowen Union, Co. Donegal, vice Alex. Irvine, L.R.C.S.I., resigned, and appointed to the Irvinestown Town Dispensary District of the Irvinestown Union.

H. G. KNAGGS, M.D., has been elected a Fellow of the Linnæan Society.

J. F. M'GILL, L.F.P. & S. Glas., has been elected Medical Officer and Public Vaccinator for the Parish of Ballantrae, Ayrshire, vice John Dunlop, L.F.P. & S. Glas., resigned.

J. NORRIS, M.R.C.S.E., has been elected Assistant Medical Officer to the Cheshire Lunatic Asylum, vice H. L. Harper, M.D., appointed Medical Superintendent.

J. S. TURNER, M.R.C.S., has been appointed Surgeon to the Penge General Dispensary.

Births, Marriages, and Deaths.

BIRTHS.

On the 25th of Nov., at Tien-Tsin, China, the wife of Thomas A. Ainslie, M.D., of a daughter.

On the 10th ult., the wife of R. Istance, M.R.C.S.E., of Risca, of a daughter.

On the 18th ult., at Milnthorpe, Westmoreland, the wife of Hanson Evison, M.R.C.S.E., of a son.

On the 21st ult., at Hillside Cottage, Chirnside, Berwickshire, the wife of C. Stuart, M.D., of a son.

On the 23rd ult., at South Penge-road, Penge, the wife of E. Diver, M.D., of a daughter.

On the 23rd ult., at Woodstock, Oxon, the wife of Dr. Frederic Taylor, of a son.

On the 24th ult., at Reigate, the wife of H. Harris, M.R.C.S.E., of a son.

On the 24th ult., at St. Helens, Lancashire, the wife of E. P. Twyford, M.D., of a daughter.

On the 25th ult., at Springfield, near Tooting, the wife of J. S. Biggs, M.D., of a son.

On the 25th ult., at Manchester-square, the wife of W. H. Fuller, M.D., of a daughter.

On the 28th ult., at The Priory, Wrexham, the wife of T. Eyton Jones, M.R.C.S.E., of a daughter.

MARRIAGES.

On the 24th ult., at Aberdeen, G. Park, M.D., Army Medical Staff, to Christian, daughter of the late P. Williamson, Esq.

On the 24th ult., at Hampstead, Charles Hammond, L.R.C.P.L., to Amelia, daughter of T. Hawkins, Esq., of Gloucester House, Hampstead.

On the 25th ult., at Edlington, Rowland Hills, M.R.C.S.E., of Conisbro, Doncaster, to Miss Harriett, daughter of Edward Parker, Esq., of Balley, near Doncaster.

DEATHS.

On the 7th ult., at Acre House, Brixton, Mary Ann, wife of Benj. Evans, F.R.C.S.E., aged 50.

On the 16th ult., James Leitch, L.R.C.S.Ed., Surgeon R.N., of Crieff, Perthshire, aged 84.

On the 18th ult., at Woodcot-Dollar, Dr. W. Dalgairns, late Medical Service Bombay Army, aged 70.

On the 18th ult., at Monkwearmouth, Andrew Munro, Surgeon, formerly of Ovingham, Northumberland, aged 77.

On the 19th ult., Peter Macintyre, M.D., of Canning-street, Liverpool, aged 68.

On the 23rd ult., at Hurst, near Manchester, after a short illness, Adriana Margaret, daughter of William and Adriana Harris, of Worthing, Sussex, aged 17.

On the 24th ult., at Wymondham, Norfolk, Thos. Edward Tawell Colman, Surgeon, aged 58.

On the 24th ult., W. G. Walker, M.R.C.S.E., of Oxford, formerly of Brill, Bucks.

On the 25th ult., R. J. Griffith, Surgeon, of Adelaide-road, South Hampstead, formerly Surgeon R.N., aged 79.

On the 25th ult., R. G. Mackee, M.R.C.S.E., of Husthwaite, Yorkshire, aged 29.

On the 28th ult., W. H. Evans, M.R.C.S.E., of St. Albans, aged 53.

BOOKS ETC. RECEIVED.

Mr. C. Heath's Manual of Minor Surgery.
Mr. N. C. Macnamara's Lectures on Diseases of the Eye. (Calcutta.
Dr. Letheby's Report on the Cattle Plague in 1865.
The Cattle Plague in 1745.
Dr. Bastian on the Human Brain.
Duncan and Millard on the Imbecile and Idiotic.
The Pacific Medical and Surgical Journal.
Report of the Newcastle Pauper Lunatic Asylum.
Things New and Old.

To Correspondents.

A Constant Reader, (Bulwell.)—1. Under the provisions of the statute 6 and 7 Wm. IV., c. 80, the medical witness must be a "legally qualified practitioner," and the Medical Act defines a "legally qualified medical practitioner" as "a person registered under this Act." An unqualified person is therefore not entitled to a fee for giving evidence before a coroner.—2. The magistrates might refuse to acknowledge the item in the coroner's account.—3. An objection may be made; but the coroner would have the power to examine the witness.

THE letter of *The Secretary of the New Sydenham Society* arrived too late for insertion in our present number. It shall be published in our next.

VEGETABLE PARASITES.

To the Editor of THE LANCET.

SIR,—I regret to find that in an unimportant paper which I lately communicated to the Microscopical Society, I have in some way or other, and most unintentionally, given offence to Dr. Tilbury Fox. I trust, therefore, you will, with your usual impartiality, allow a brief space for my reply to this gentleman's observations contained in your impression of last week.

In the first place, I think it only right to state that very nearly a fortnight before the meeting took place, and my paper was read, I wrote Dr. Fox a friendly and pressing invitation to come to the Microscopical Society, not simply to listen to my observations, but to discuss and criticise my paper to the fullest extent. I expected to see him, and duly entered his name in the visitors' book. However, he did not come; but so marked were my acknowledgments of Dr. Fox's labours, that the President called especially upon Dr. Fox to speak to the question. I need scarcely say that had he been present, his objections would have received prompt and due recognition in the pages of the *Microscopical Journal*. I mention this, of course, to show my desire to do justice in every way to Dr. Fox, and I think it is to be regretted he did not attend the meeting.

But to the gravamen of Dr. Fox's communication to THE LANCET. He has taken certain passages from my paper, and placed them side by side with selected quotations from his own writings, thereby wishing to convey the impression that my investigations into the vegetable parasites are much later, and indeed have not only followed, but have been plagiarized from his. My first paper, entitled "A Microscopical Inquiry into the Vegetable Parasites infesting the Human Skin," was read and discussed before the members of the Microscopical Society, October, 1858, and published in the "Transactions" January 1st, 1859. Dr. Fox appears to have been aware of this; for in his *first published* papers on the same subject, which appeared, as he says, in your columns, vol. ii., p. 284, 1859, six or eight months, be it observed, *after* my paper, he draws largely on my observations and experiments. I have good grounds for saying that my paper led Dr. Fox to pursue the same line of inquiry, and investigate more closely the origin of these parasites; and therefore this, I think, fairly disposes of the question of priority.

Now, if you, Sir, will do me the favour to turn to my last paper, a copy of which I herewith send, you will find it bears the following title:—"*Further* Observations on the Vegetable Parasites, &c." It commences with a reference to my earlier paper, and then amply and fully enters into the labours of Dr. Fox in these words: "*Dr. Tilbury Fox, who in* 1863 *published an excellent* work on 'Skin Diseases of Parasitic Origin,' *was the first to call the attention* of the profession to a point of considerable practical value," &c., and in his own words I give a bracketed quotation. I could only wish that Dr. Fox had always quoted me as fairly. He has not done so, and I therefore have a right to complain of verbal alterations and the omission of the greater part of the last paragraph in his letter of the 12th. I am quite sure of this, that neither Dr. Lowe nor Mr. Druce (whose names Dr. Fox imports into this discussion without much reason) will in any way indorse his views; and as to the particular experiments made by Mr. Druce, Dr. Fox knows as well as I do that they were made at my suggestion, and *expressly for my use in this very paper*. This gentleman's results were therefore communicated to me privately, and I some months ago handed the letter to Dr. Fox for his perusal; and therefore if he is not as well informed as myself as to the share these experiments have in "the apparently novel matter in the paper," no one else can possibly be. Of this, however, I am quite certain, that as my friend Mr. Druce is a well-to-do brewer, he is not likely to write a paper upon parasites, nor a line in an illiberal spirit upon this subject.

With regard to the particular paragraphs or words claimed by Dr. Fox, I find upon turning to my own MS. (which by the way I received only a few days since from the Editor of the *Microscopical Journal*, and therefore had no opportunity of making several necessary corrections in the proof before publication) that the words and paragraphs Dr. Fox says he published in THE LANCET were actually quoted from, and as I believe properly attributed to, the accomplished author of the "Science and Practice of Medicine," Dr. Aitken; and if you turn to vol. ii., page 179, you will find the words given as the *deliberate* conclusions of Dr. Aitken after a careful review of the writings of "Hebra, Lowe, Hogg, and Berkeley."

One word about the advertisement, which appears to have aroused Dr. Fox. I need scarcely disavow all knowledge of it, nor do I know how it came there. I can only suppose it must have emanated from the publisher of the *Microscopical Journal*; but at all events I have no more to do with it than Dr. Fox has.

I am, Sir, your obedient servant,

Bedford-square, Jan. 30th, 1866. JAMES HOGG.

Ajax.—It is not always necessary to speak; but it is always necessary to speak the truth when silence is broken.

Dr. *Mackenna's* paper will be inserted in our next impression.

PRELIMINARY EXAMINATION OF THE ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH.

To the Editor of THE LANCET.

SIR,—Could any of your readers kindly inform me of the character of the Arithmetical and English Language papers at the preliminary examination of the Royal College of Physicians of Edinburgh, as, the examination-papers not being published, I have no means of obtaining them.

I am, Sir, your obedient servant,

January, 1866. RUBR.

Mr. Braithwaite, (Leeds.)—The Medical Officer of Health is appointed by the vestry or district board of each district, who fix the amount of salary, and can remove him at pleasure. He is expected by the Act to point out the most efficient modes of ventilating public buildings; but this is a function seldom exercised. There are about forty districts in the metropolis of very different sizes and populations. The other information shall be forwarded in a private letter.

Middlesborough-on-Tees.—In the present stage of the proceedings we avoid any comment upon the merits of the particular inquiry which has terminated in a verdict of "manslaughter" against Mr. Simpson. A coroner's inquest is only a preliminary investigation, and the evidence to some extent is generally incomplete. The question of "unqualified assistants" is one of the most important that can occupy the attention of the profession.

THE request of *Dr. Parkes* shall receive attention.

MEDICAL PRACTITIONERS IN NOVA SCOTIA.

To the Editor of THE LANCET.

SIR,—Will you allow me to add my testimony to that of "A Travelled Physician" in your last week's issue, and to say that no insinuation could be more unfounded than that to which he refers as having appeared in the "Medical Annotations" relative to the medical practitioners of Nova Scotia.

Not being a member of the profession myself, my evidence may be considered perfectly disinterested; and I can honestly affirm, after nearly six years' residence in Nova Scotia on military duty, that there are few provincial towns in Great Britain so well provided with skilled and attentive physicians as Halifax, the capital of that province; that there are no medical schools there, nor was a degree *ever* sold by any of the Colleges; that where the practitioners do not hold diplomas from Edinburgh or London, they have received them from good schools in the United States; and that there are now in that country schools, such as those of Philadelphia, whose degree is by no means to be despised.

While I feel certain that the statement to which I object must have originated in imperfect information (too common an occurrence with Englishmen in colonial matters), I cannot refrain from contradicting it in such plain language, as it is not merely unjust towards an honourable body of men, but is also calculated to mislead students who may be desirous of getting a degree without working for it. I can assure your readers that a quack would not have a very protracted career in Nova Scotia, and that the sale of their honours has not yet been adopted by the Universities of that province.

I enclose my card, and remain,

Your obedient servant,

January 29th, 1866. MILES.

A Candidate, (Reigate.)—No official notification of the proposed changes in the Fellowship examination has yet been made by the College. If our correspondent intends to offer himself in April for the "preliminary," or in May for the "professional," he will not come under the operation of the contemplated changes. Write to the Secretary.

DR. PEARSE AND THE TIVERTON BOARD OF GUARDIANS.

The Rev. C. S. Bere writes thus respecting Dr. Pearse:—

"The poor in my parish are unanimous in declaring that they have never been attended by any one like Dr. Pearse. He is not a mere official, doing his scantily-paid work as a drudgery; he is a *gentleman* in the best sense of the word; he is kind, considerate, prompt, attentive, to a degree that I have never personally witnessed in any medical officer. He is ever ready with words of sympathy and counsel, and has the rare power of making the poor feel he is their friend. Many, too, are his acts of private charity and generosity, which are well known in this neighbourhood. If Dr. Pearse deals liberally with the money of the ratepayers, he is at least still more liberal with his own."

P. Q. V.—A solution of permanganate of potassa, of variable degrees of strength according to the purpose for which it is intended to be used. A full description of the strengths &c. appropriate to each occasion may be found accompanying the agent when purchased ready prepared.

HOSPITAL STATISTICAL REPORTS.

To the Editor of THE LANCET.

SIR,—Can any of your readers kindly inform me whether any other hospital in London publishes an annual statistical report, fully analysed, besides the London Hospital? If so, pray what are they? I suppose they can be obtained by application to the Secretaries to the respective hospitals?

Your obedient servant,

Edinburgh, Jan. 26th, 1866. T. W.

A Fellow, (Southampton.)—The retiring members of the Council in July next, unless there should be a resignation or death vacancy, will be Messrs. Hilton and Luke; the former is a Vice-President, and the latter has on *two* occasions been President of the College, and will retain his seat as an Examiner during the pleasure of the Council, notwithstanding the probable event to which our correspondent refers.

Mr. T. O. Walker.—With such a qualification, the Society would not permit their name to be used as prosecutors.

Mr. Mordey Douglas's letter shall appear next week.

CURVATURE OF THE SPINE.

To the Editor of THE LANCET.

SIR,—It appears in your impression of this day that I stated in the discussion which followed Mr. Barwell's paper on "Lateral Curvature of the Spine," at the Royal Medical and Chirurgical Society, that "after rotation had taken place, appliances were useless." It should have been that *elastic appliances* were useless. Not only are appliances not useless, but well-made instruments, when properly applied, are sufficient to cure curvatures of the spine, even after considerable rotation has taken place.

I am, Sir, yours, &c.,

Grosvenor-street, Jan. 27th, 1866. B. E. BRODHURST.

Australian.—The following remarkable "notice to subscribers" is appended to the November number of the *Australian Medical and Surgical Review*: "In consequence of the impossibility of obtaining an Editor capable and willing to conduct the *Medical and Surgical Review* as *an impartial scientific journal*, the publisher begs to announce his intention to discontinue the publication of the same at the end of the current year, and at the same time begs to thank his numerous subscribers for their past support." Along with this number we have received from a trustworthy correspondent some information concerning the state of journalism and surgery in the colony, as likewise the more immediate cause leading to the above announcement. The pressure upon us in respect to home matters is such, however, that we really cannot at the present moment find room for the discussion of colonial professional disturbances.

W. B.—By courtesy, not by right.

July, 1866.—The total number of Fellows of the College is 1310—viz., 312 by examination, 254 honorary, and 744 by election. The greatest number of votes recorded was in last July—namely, 355, and of this number 105 resided beyond twenty miles from London, and the remaining 250 within that circuit.

Mr. D. O. Edwards's paper shall appear in an early number.

ANEURISMAL TUMOUR IN THE POSTERIOR TRIANGLE.

To the Editor of THE LANCET.

SIR,—In the case of "Aneurismal Tumour in the Posterior Triangle," under the care of Sir Wm. Fergusson at King's College Hospital (*vide* THE LANCET Jan. 20th), I perceive that it was supposed that the contents of the tumour had escaped into the pleural cavity, as the external flow of blood could not sufficiently account for the subsidence of the tumour. In the account of the autopsy there is no allusion to this. May I ask if any such escape took place? and if not, how the disappearance of the tumour may be accounted for?

Yours respectfully,
January 24th, 1866. ENQUIRER.

*** No blood was found in the pleural cavity. The sac would seem to have been kept full of blood by the pumping action of the heart, and when this failed the supply ceased. The greater part of the contents then probably escaped through the skin, whilst some doubtless regurgitated, the man being in an upright position.

A. J. M.—The theory is too crude for publication. It does not bear any real relation to the question at issue.

BETHNAL GREEN WORKHOUSE.

Dr. Smart, the medical officer, writes to say that No. 3 diet, which our Commissioners state should be a thing of the past, has, in fact, long been out of use; of which fact, however, there was no indication in the tables forwarded to us. Dr. Smart mentions also that the meat described as steamed, is boiled.

P. H. J.—From a third to half a grain each dose.

THE GRIFFIN TESTIMONIAL FUND.

To the Editor of THE LANCET.

SIR,—The following subscription has been further received on behalf of the above Fund:—

Dr. John O'Reilly, Ware	£0	10	6
Amount previously announced	132	19	3
Received at THE LANCET Office	9	9	0

Yours obediently,
ROBERT FOWLER, M.D.,
Treasurer and Hon. Sec.

145, Bishopsgate-street Without, Jan. 31st, 1866.

G. P. R., M.D.—As the Council of the College of Surgeons does not subscribe to Medical Benevolent Societies, it is not likely they contribute to the funds of Masonic charities, although there are several members of the craft on the Council.

A Subscriber, (Sidmouth.)—No such work has been published, though much needed.

J. H. S., (Portsmouth.)—Certainly, a month can be profitably spent on board H.M.S. *Dreadnought* before entering the Royal Navy. The fee is £10 10s., including rations and cabin.

H. D. R.—The proper way of acting would be to divide the fee.

A London Physician.—Burn them.

Mr. A. Jones will find the information he requires in any of the standard works on Surgery.

Juvenis.—In such consultations, double the charge of the usual visits would be proper. In special cases, however, the ordinary fee of a consulting practitioner could be claimed.

Dr. McF., (Alva.)—Churchill or Tanner.

Dr. Wilbraham Falconer (Bath) is thanked for a copy of his table for registering the temperature in fever, &c.

SELF-SUPPORTING DISPENSARIES.

To the Editor of THE LANCET.

SIR,—I seek for information through THE LANCET as to the general organization and methods of working "self-supporting dispensaries," and whether such an institution in a fashionable watering-place of above 40,000 inhabitants, already provided with a general hospital and dispensary, would be likely to succeed. Any member of the profession answering the query will oblige,

Your obedient servant,
January 21st, 1866. QUESTOR.

EVERY communication, whether intended for publication or otherwise, must be authenticated by the name and address of the writer. Papers not accepted cannot be returned. Articles in newspapers, to which attention is sought to be directed, should be marked. Communications not noticed in the current number of THE LANCET will receive attention the following week.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Copland; Dr. Brown-Séquard; Dr. Hughes Bennett; Mr. Brodhurst; Dr. Kennedy, Dublin; Mr. Teevan; Mr. Nunneley; Mr. Murray; Mr. Thomas, Swansea; Mr. Inman; Mr. Moore; Mr. Young; Mr. Davies; Dr. Smart; Mr. Evison, Milnthorpe; Mr. Jackson; Dr. MacCormac, Belfast; Mr. Harris, Worthing; Dr. Swinburn, New York; Dr. Mackenna; Mr. Barnes; Dr. J. McCall; Mr. Dickson, Tyndwfr; Dr. J. O. Reilly; Mr. Noon, Dobscross; Mr. Brown; Mr. Wood; Messrs. Southard and Co.; Mr. Griffin; Mr. Ellis; Mr. Spratt; Mr. Faulkner; Mr. Pitts; Dr. Wrangham; Mr. Bailey; Mr. Whittington; Mr. Skipp; Mr. Powdrell, Langport; Dr. Reed, Manchester; Mr. Douglas; Mr. A. Jones, Liverpool; Dr. Marshall, Braemar; Mr. Bruce, Kidsgrove; Dr. Falconer; Dr. Edwards, Clifton; Dr. Herbert, Manchester; Mr. Hills; Dr. Muspratt; Dr. Henson, Manchester; Mr. Locking; Mr. Armstrong; Dr. Willett, Northwich; Mr. Kendall, King's Lynn; Dr. Brodie, Cambo; Dr. Dixon; Mr. Walker; Mr. Bobart; Dr. Coates, Great Malvern; Dr. Cormick; Dr. Twyford, St. Heliers; J. B. F.; Miles; G. H.; H. D. R.; P.; R. G. R.; D. U.; J. R.; The Secretary of the New Sydenham Society; M.D.; J. C.; M.B.; N. N.; A. J. M.; T. W.; J. M.; Medico Latissimus Ibis; W. S.; Rure; Questor; J. P.; A Subscriber; H. R.; G. C.; A. W.; J. J.; A London Physician; &c. &c.

THE *Lincoln Gazette*, the *United Service Gazette*, the *Runcorn Free Press*, the *South Durham Mercury*, the *Stockton Gazette*, and the *Grocer* have been received.

Medical Diary of the Week.

Monday, Feb. 5.

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 9 A.M. and 1½ P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. General Monthly Meeting.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M.
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Mr. Radcliffe, "On recent Outbreaks of Bilious Remittent Fever in France;" and "On the Epidemic Remittent Fever of Bengal."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Mr. W. F. Teevan: "The Limited Incision of the Prostate in Lateral Lithotomy is Wrong in Principle and Mischievous in Practice."

Tuesday, Feb. 6.

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Heat."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

Wednesday, Feb. 7.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
HUNTERIAN SOCIETY.—7 P.M. Annual General Meeting.—8 P.M. Annual Oration by Mr. D. de Berdt Hovell.
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Snow Beck, "On Enlargements of Uterus, &c." — Dr. Sansom, "On the Anæsthetic Properties of Bichloride of Carbon;" and other Papers.

Thursday, Feb. 8.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Tyndall, "On Heat."
KING'S COLLEGE MEDICAL SOCIETY.—8 P.M. Mr. Perrin, "On Syphilis."

Friday, Feb. 9.

WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Classification and Structure of the Mammalia."
ROYAL INSTITUTION.—8 P.M. Mr. Archibald Smith, "On the Deviation of the Compass in Iron Ships."

Saturday, Feb. 10.

ST. THOMAS'S HOSPITAL.—Operations, 9½ A.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Westmacott, "On Art Education, and how Works of Art should be Viewed."